June 2017

# Economics and Policy in the Age of Trump

Edited by Chad P. Bown

**A VoxEU.org Book**

CEPR Press

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Centre for Economic Policy Research
33 Great Sutton Street
London, EC1V 0DX
UK

Tel: +44 (0)20 7183 8801
Email: cepr@cepr.org
Web: www.cepr.org

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# Contents

Part III: International Policy Reform: Trade policy and trade agreements

# Foreword

The surprising election of Donald J. Trump introduced new uncertainties into US economic policy, many of which may have profound implications for other countries. This eBook collects essays from leading economists which highlight the most pressing domestic and international economic policy issues. The authors outline how the activity of the Administration's first few months in office has signalled potential changes in the policy agenda, including in health care, taxation, financial sector regulation, central bank independence, immigration, trade policy and international cooperation.

The changes to economic policy being proposed by the Trump administration have potentially far-reaching effects in both the short- and long-run. Economists and policymakers from both the US and abroad must keep abreast of new developments from the Capitol in order to remain vigilant to changes in US policy with their potential knock-on effects for economic policy in the rest of the world.

CEPR is grateful to Professor Chad P. Bown for his editorship of this eBook. Our thanks also go to Sophie Roughton and Simran Bola for their excellent and swift handling of its production. CEPR, which takes no institutional positions on economic policy matters, is delighted to provide a platform for an exchange of views on this important topic.

Tessa Ogden
Chief Executive Officer, CEPR
June 2017

# 1 Introduction

**Chad P. Bown**
Peterson Institute for International Economics and CEPR

*The forgotten men and women of our country will be forgotten no longer. Mothers and children trapped in poverty in our inner cities; rusted-out factories scattered like tombstones across the landscape of our nation; an education system, flush with cash, but which leaves our young and beautiful students deprived of knowledge… This American carnage stops right here and stops right now… For many decades, we've enriched foreign industry at the expense of American industry… We've defended other nation's borders while refusing to defend our own… One by one, the factories shuttered and left our shores, with not even a thought about the millions upon millions of American workers left behind… Every decision on trade, on taxes, on immigration, on foreign affairs, will be made to benefit American workers and American families. We must protect our borders from the ravages of other countries making our products, stealing our companies, and destroying our jobs. Protection will lead to great prosperity and strength…We will bring back our jobs. We will bring back our borders. We will bring back our wealth. And we will bring back our dreams.*

*Donald J. Trump, The Inaugural Address, January 20, 2017*

The election of Donald J. Trump to the US Presidency on November 8, 2016 was unexpected. Despite being the Republican Party's nominee, Trump campaigned as a political outsider on a platform of eclectic policy ideas. And yet as Trump and many members of his appointed cabinet do not have prior political or governing experience, there is little historical record from which to predict his administration's economic policymaking priorities.

With a background in real-estate and reputation as a businessman astute at cutting deals, what – if any – principles would he stick to when formulating policy? Early speculation was that he might adopt a transactional approach that could turn out less ideological and more akin to compromise. And yet for several reasons, including selection of key senior officials, it appears increasingly unlikely that the Trump administration will seek out economic evidence and research to help formulate policy.[1]

In important ways, Trump's Presidency has generated considerable uncertainty for a variety of important areas of US economic policy. The tenor of his Inaugural Address suggests a very apocalyptic view of the state of the US economy as well as America's place in the world.

Republican Congressional majorities in the House of Representatives and Senate imply a political opportunity for Trump to enact new legislation and introduce major overhauls to the existing laws and institutions that drive policy. Furthermore, a US President can take many actions unilaterally – through regulatory decisions, funding choices, enforcement prioritisation, and Executive Orders – to also effectuate economic policy change. Indeed, some of Trump's almost immediate actions on Executive Orders – and the resulting US court challenges – signal his administration's willingness to test historical limits that may have restrained US Presidential authority.

This collection of essays by leading economists highlights many of the most pressing US and international economic policy issues on the Trump docket. Indeed, the flurry of activity during the Trump administration's first '100 days' in office confirms a nontraditional approach to governing, a still largely unknown short- and long-term strategy, and unclear economic policy priorities. Some of the policies being subjected to potential reform – including health care, taxes, and financial sector regulation – may have been likely to arise, independent of the individual sitting in the Oval Office. Yet others – such as central bank independence, more radical steps on immigration, and reversing the US's decades-long approach to trade policy and commitment to international cooperation – are much more extreme, far-reaching, and potentially disruptive.

1 Josh Zumbrun "Donald Trump's Cabinet Won't Include Chairman of CEA", *The Wall Street Journal*, 9 February 2017.

## Domestic Policy Reform I: Health, anti-poverty, labour, education, immigration and environment

A first set of essays examines the US domestic economy and key areas of policy affecting health, individuals and families, education, labour markets, and the environment.

President Trump and the Republican leaders in the House of Representatives made reform to the US system of health care and health insurance a first legislative priority in 2017. Thomas Buchmueller and Helen Levy analyse the implications of different reform strategies to the 2010 Affordable Care Act (ACA), or 'Obamacare.' Introduction of the ACA had sharply reduced the share of Americans without health coverage; some of its elements attempted to control sharply increasing US health costs. Because health care remains highly politically contentious, the new US political environment means considerable change to economic incentives and outcomes is likely – either through legislation, if not regulatory action – thereby affecting tens of millions of Americans.

Melissa Kearney introduces the broader set of US social safety net programmes and growing need to address rising income inequality. The fabled 'American Dream' – in which children achieve higher levels of income than their parents – is increasingly under threat. Kearney reviews evidence regarding federal programmes on schooling, mentoring, and housing assistance that seek to improve the long-term trajectory of low-income youth. She also highlights other important anti-poverty programmes, such as Supplemental Nutritional Assistance Program (SNAP), Medicaid, and the Earned Income Tax Credit (EITC). Despite the needs of children and, indeed, many of Trump's 'forgotten men and women', their challenges run the risk of not being addressed. President Trump's draft 2018 budget called for major cuts to the US social safety net and this has the potential to adversely impact lifetime outcomes for at-risk youth.

The Presidential campaign of 2016 also brought into sharp political relief certain underperforming areas of the US labour market, including manufacturing job loss, declines in the labour force participation rate, and the geographic concentration of certain adversely-impacted communities. Mine Senses examines the evidence and rejects the political argument that increased international trade – especially imports from China and Mexico – was mostly to blame for the negative outcomes affecting workers at the low end of the wage and skill distribution over the 2000s.

While trade played a role, automation and other factors had a larger impact on factory workers. Nevertheless, Senses highlights the need for policy reform, addressing the tradeoffs associated with expanding certain elements of the US social safety net – e.g. extended unemployment insurance in the event of job loss – against other programmes to incentivise workers to retain active labour market participation and adjust into new jobs, despite individual, demographic, and geographic challenges.

Jordan Matsudaira introduces and analyses the increasingly important for-profit college sector, which is a particularly politically contentious area of the US 'education system, flush with cash'. Matsudaira explores the motivations and implications of the 2014 gainful employment (GE) regulations, tackling questions of how to regulate a sector with reports of abuse of federal student aid and growing suspicion that many of the educational programmes were not successful at preparing students for the future needs of the labour market.

US immigration and President Trump's proposal to build a wall along the US border with Mexico were also political flashpoints of the 2016 campaign. The first 100 days of his administration featured many attempts at action on these issues. Anna Maria Mayda and Giovanni Peri examine a slew of Trump's executive orders, including banning travellers and immigrants from certain majority-Muslim countries, enhanced deportations and construction of the wall, and limiting access to H1-B visas for highly-skilled foreign workers. The authors highlight the negative and potentially severe impacts of Trump's aggressively anti-immigrant policies for the US economy.

Arik Levinson explores the implications of the Trump administration's proposed changes to the US Corporate Average Fuel Economy (CAFE) regulations. He documents how the existing fuel economy standards have a built-in bias – equivalent to an import tariff – ranging from $80 to $200 per vehicle. Thus, Trump's potential loosening of the environmental standard would *lower* those implicit import tariffs; the irony is that this action would reduce a cost that disproportionately impacts non-US automakers. This, of course, runs counter to his explicit threats – perhaps most-famously made via Twitter – to raise trade barriers and impose additional taxes on US auto companies that move production offshore.

## Domestic Policy Reform II: Tax, central banking, financial regulation, and the macroeconomy

A second set of essays on US domestic policy includes the potential for tax reform and change to monetary policy, financial regulatory reform, and US macroeconomic performance.

US tax reform is another early item on the Trump administration's agenda; the last major overhaul of the US tax code took place in 1986. Complaints involve marginal tax rates as high as 39.6% on individuals and 35% on corporations, distortions arising from loopholes and carve outs, and the increasing difficulty that national authorities have in taxing multinational companies in a global environment, due to corporate inversions and the complexities of transfer pricing. Nirupama Rao examines the major features of the tax reform priorities highlighted by Trump in the presidential campaign and the border-adjusted cash flow tax (CFT) proposal made by House Republican leadership.

One component of the House Republicans' cash-flow tax proposal for corporate reform is inclusion of a border adjustment tax. Mary Amiti, Emmanuel Farhi, Gita Gopinath and Oleg Itskhoki assess this politically controversial and oft-misconstrued tax adjustment that makes export sales deductible from the corporate tax base, while expenditure on imported goods would not be deductible. While new to the United States, the broad concept is a common feature of value-added consumption taxes found worldwide. The authors explore what is likely to arise if the United States were to shift to this form of taxation if any of several 'neutrality conditions' breaks down in the real world. They describe the likely consequences if exchange rates, domestic prices or wages are sticky; or if monetary policymakers intervene, in order to show how the border adjustment tax could have strong and disruptive effects on activity such as US consumption and production, as well as trade flows.

Stephen Cecchetti and Kermit Schoenholtz examine concerns that President Trump and other politicians may threaten the independence of the Federal Reserve. Because central bank independence is a relatively recent innovation in policymaking, it remains somewhat politically controversial in the United States. The authors illustrate the institutional design benefits of the current system as one that credibly addresses time-consistency problems in macroeconomic policymaking.

This includes keeping inflation low and stable, as well as the need to prevent panics, as most recently arose during the financial crisis of 2007-2009.

The Trump Administration has announced its intent to pursue financial deregulation. The Dodd-Frank Act was introduced in 2010 as a response to the financial crisis and was billed as an effort to prevent such crises from taking place in the future. Important elements of Dodd-Frank involved identifying and potentially addressing issues related to 'systemically important financial institutions' (SIFIs) in the US economy and developing a complex set of regulations and fora for oversight. Thomas F. Cooley and Lawrence J. White motivate the regulatory concerns and examine the House Financial Services Committee's 'Financial CHOICE Act' proposal, which could provide the Trump administration with a blueprint for financial regulatory reform.

Overall US macroeconomic performance is a final important area of domestic policymaking concern. President Trump has said at various times that US economic growth could be 4, 5, or even 6% per year. Jay Shambaugh examines the argument by focusing on key demographic constraints on US growth, such as labour force participation, as well as trends in US productivity. Realistic assessments of US growth matter because of how they affect other critical policymaking decisions. Examples include not only how the Fed establishes monetary policy, but also how the President and Congress set fiscal policy priorities; e.g., how much growth can reasonably be expected to 'pay for' a sizeable tax cut.

## International Policy Reform: US trade policy and trade agreements

The third set of essays features an assessment of President Trump's potentially radical reshaping of US trade policy. One particularly striking line from his Inaugural Address – 'Protection will lead to great prosperity and strength' – indicates that an influential wing of his administration finds trade barriers appealing and perceives them as likely to benefit the US economy.[2]

2 Shawn Donnan and Demetri Sevastopulo, "White House civil war breaks out over trade", *Financial Times*, 10 March 2017.

**Table 1** The Trump Administration's first '100 days of trade policy' in 2017

| Date | Trade policy-related action |
|---|---|
| January 23 | Presidential Memorandum Regarding Withdrawal of the United States from the Trans-Pacific Partnership Negotiations and Agreement |
| March 1 | Office of the U.S. Trade Representative releases The President's 2017 Trade Policy Agenda sharply criticizing the WTO and the failure of its dispute settlement body that it was not supposed to 'add to or diminish the rights or obligations' through its rulings |
| March 20 | Under pressure from Trump administration, G20 Finance Ministers issue communiqué without traditional joint statement promising to 'resist all forms of protectionism' |
| March 29 | Department of Commerce initiates inquiry into whether China should continue to be treated as a nonmarket economy (NME) country under US antidumping and countervailing duty laws |
| March 30 | Acting USTR draft letter sent to US Congress on United States' NAFTA renegotiation priorities (leaked). Inter alia, seeks to 'level the playing field on tax treatment' and add 'a safeguard mechanism to allow a temporary revocation of tariff preferences' |
| March 31 | Presidential Executive Order on Establishing Enhanced Collection and Enforcement of Antidumping and Countervailing Duties and Violations of Trade and Customs Laws |
| March 31 | Presidential Executive Order Regarding the Omnibus Report on Significant Trade Deficits |
| April 7 | President Trump and China's President Xi Mar-a-Lago summit concludes with announcement of 100-day study of the bilateral trading relationship |
| April 14 | Department of the Treasury submits to Congress Report on Foreign Exchange Policies of Major Trading Partners of the United States; it does not name China a 'currency manipulator' |
| April 18 | Presidential Executive Order on Buy American and Hire American |
| April 20 | Presidential Memorandum for the Secretary of Commerce on Steel Imports and Threats to National Security (self-initiation of Section 232 investigation) |
| April 24 | Secretary of Commerce announces Preliminary Determination of Countervailable Subsidies on Imports of Softwood Lumber from Canada |
| April 26 | White House reportedly drafts Presidential Executive Order on Notice of Withdrawal from NAFTA, ultimately does not submit (leaked) |
| April 26 | Suniva, Inc. files Section 201 petition with USITC regarding Crystalline Silicon Photovoltaic Cells and Modules initiating a global safeguard investigation |
| April 27 | Presidential Memorandum for the Secretary of Commerce on Aluminum Imports and Threats to National Security (self-initiation of Section 232 investigation) |
| April 29 | Presidential Executive Order on Establishment of Office of Trade and Manufacturing Policy |
| April 29 | Presidential Executive Order Addressing Trade Agreement Violations and Abuses, questions WTO and its principles of MFN and reciprocity |

Table 1 lists both significant trade policy-related actions that the Trump administration has taken in its first 100 days in office and the signals it has sent about potentially forthcoming changes to US policy.

Unlike some of the other areas of policy reform, the President has potentially more unilateral authority to implement significant reversals of prior trade-opening initiatives.[3] Nevertheless, the only definitive policy change, taken during the first 100 days, took place in the first week, when the administration withdrew from the Trans-Pacific Partnership (TPP).

The other items listed in Table 1 could, perhaps, be just the tough talk of a negotiator who has already commenced a public bargaining game. They may not result in Trump imposing policies that damage the US economy. Many of the Executive Orders, for example, are intentions to study the sources of a 'problem' that the Administration perceives the US economy to be facing. However, one concern is that because the issue being selected for study – e.g., bilateral trade deficits, trade agreement violations – may be itself a non-problem, efforts to identify its cause can only result in misguided policy. A second is whether this '100 day' list is just the tip of the iceberg and that more sweeping changes to US policy are still to come. A third is that direct criticism of the World Trade Organization (WTO) undermines the United States' historical commitment to the rules-based trading system, generates uncertainty, and opens the door for other countries to follow suit.[4]

Kyle Handley and Nuno Limão introduce many of the trade policy initiatives that President Trump has proposed or implemented through his first 100 days; these include unilateral policies, renegotiation or withdrawal from agreements, and threats of import protection.

3 A review of the President's authority to make unilateral trade policy changes via activation of US trade laws or changing the terms of trade agreement engagement is found in Gary Clyde Hufbauer "Could a President Trump Shackle Imports?", in Marcus Noland, Gary Clyde Hufbauer, Sherman Robinson, and Tyler Moran (Eds.) *Assessing Trade Agendas in the US Presidential Campaign*, Washington, DC: Peterson Institute for International Economics, 2016.

4 Chad P. Bown, "Is the WTO one of Trump's 'big quagmire deals'? Here's what's at stake", *The Washington Post*, 28 February 2017.

They then rely on recent research insights to argue that his approach may generate a new trade 'cold war' that increases uncertainty and threatens the existing, rules-based system. The concern is that such policies reduce trade related investments and could result in export contraction and an increase in US consumer prices.

A repeated theme of the Trump administration is its disavowal of the WTO and multilateral system, and a stated preference for only negotiating one-on-one deals. Chad P. Bown, Robert W. Staiger, and Alan O. Sykes use Trump's scepticism of the WTO to investigate some of the basic reasons why the United States has championed certain principles in trade negotiations, including nondiscriminatory treatment, through the 'most-favored-nation' (MFN) rule, and 'reciprocity'.[5] Their explanations rely on both economic incentives and historical 'lessons learned' from the period prior to the US adoption of its current negotiating strategy, which began with the Reciprocal Trade Agreements Act of 1934.

The first practical trade policy action that President Trump took upon entry into office was to issue a Presidential Memorandum withdrawing the United States from the negotiations of a potential TPP agreement. Through the TPP, the Obama administration had sought to introduce several new rules and disciplines covering trade with 11 other countries in the Asia-Pacific region. Katheryn Russ introduces and examines a range of potential economic and social challenges posed by trading with the region; this includes specific concerns raised by the emergence of China and its incomplete transformation into a market economy.[6] Yet, she argues that the United States stands to lose considerably if it chooses to disengage from rules-based trade with one of the fast-growing regions in the world.

There are also increasingly concrete signs that the Trump administration intends to formally renegotiate the North American Free Trade Agreement (NAFTA), a deal between the United States, Canada and Mexico implemented in 1994.[7]

5 See, for example, "Press Briefing by Secretary of Commerce Wilbur Ross on an Executive Order on Trade Agreement Violations and Abuses", *The White House*, 28 April 2017.

6 Chad P. Bown, "Trump says China is not a market economy. That's a big deal", *The Washington Post*, 12 December 2016.

7 Chad P. Bown, "What is NAFTA, and what would happen to U.S. trade without it?", *The Washington Post*, 15 February 2017.

Emily Blanchard explains how the removal of border barriers and adoption of deeper trade and investment provisions led to a significant integration of economic activity across the NAFTA region through cross-border supply chains. Thus, an important asymmetry could arise: while implementing NAFTA had small effects on US economic wellbeing at the time, terminating or renegotiating NAFTA in a manner that disrupts these established supply chains could have a much more negative effect on the US economy.

Meredith Crowley examines the Trump administration's affinity for use of antidumping and other 'trade enforcement' as tools to implement trade barriers for selective industries. The significance of trade enforcement cases was made apparent after four remarkable actions arose in the eight days immediately preceding the '100th day' Presidential benchmark. The Trump administration self-initiated two separate investigations – one over steel and one over aluminium – claiming that imports of these products were a threat to US national security. These were triggered under one rarely-used law – Section 232 of the US Trade Expansion Act of 1962 – that has not been deployed since 2001.[8] Third, Commerce Secretary Wilbur Ross and President Trump politically escalated an otherwise routine, technical announcement that the United States would begin imposing preliminary countervailing duties on softwood lumber from Canada.[9] Fourth, the domestic solar cell industry requested an investigation under the US safeguard law – Section 201 of the Trade Act of 1974 – in another example of an historically rare type of enforcement case.

A final, forward-looking essay considers the future of United States trade relationship with Europe. Nikhil Datta and Swati Dhingra recall the status of the Trans-Atlantic Trade and Investment (TTIP) talks that the Obama administration had commenced with counterparts from the European Union in 2013. Even putting aside political developments in the United States, the United Kingdom's 'Brexit' referendum on June 23, 2016 and decision to leave the European Union has complicated European policymaking.

8 Chad P. Bown, "Trump's threat of steel tariffs heralds big changes in trade policy", *The Washington Post*, 21 April 2017.

9 Chad P. Bown, "Did Trump just take an ax to the U.S. trade policy relationship with Canada?", *The Washington Post*, 27 April 2017.

Despite President Trump's affinity for negotiating bilateral deals, trade agreements with either the European Union or with an independent UK are not on the immediate horizon. This is due to both the European priorities of unwinding and then re-establishing the UK-EU bilateral relationship, and the complexity of each then negotiating future deals with countries outside Europe, which will largely be affected by the terms of that new relationship.

Overall, the Trump administration has signalled a potentially sharp break in US trade policy. Nevertheless, not everything is new, as some elements have parallels with earlier eras. Consider, for example, the aggressive unilateralism, focus on bilateral trade deficits, and tendency toward outcome-based metrics. These suggest the possible reemergence of 'managed trade arrangements' – i.e., the voluntary export restraints or voluntary import expansions – that the United States put forth *vis-à-vis* Japan, especially in the 1980s. Second, the Trump administration's misperception of the benefits of bilateral over multilateral deals echoes earlier US debates and its pre-1934 approach to trade policy.

Nevertheless, the rest of the world and the rules-based world trading system could be in for a rude awakening, if the rhetoric of the new US administration translates into policy reality.

## About the editor

**Chad P. Bown** is Senior Fellow at the Peterson Institute for International Economics in Washington and a Research Fellow at CEPR in London. Bown has served as Senior Economist in the White House on the President's Council of Economic Advisers, and he is formerly a tenured Professor of Economics at Brandeis University. Bown spent a year in residence at the WTO Secretariat in Geneva, and he was most recently a Lead Economist at the World Bank. In 2004, Bown initiated a trade policy transparency project that resulted in the Global Antidumping Database, which he managed through 2016 as part of the World Bank's Temporary Trade Barriers Database. He currently co-directs an annual program of scholars providing legal-economic assessments of WTO case law published with Cambridge University Press.

His books include *The Great Recession and Import Protection* (CEPR and World Bank, 2011), *Self-Enforcing Trade: Developing Countries and WTO Dispute Settlement* (Brookings Institution Press, 2009) and *The Law, Economics and Politics of Retaliation in WTO Dispute Settlement* (co-edited with Joost Pauwelyn, Cambridge University Press, 2010). Follow him on Twitter @ChadBown.

# Part I

## Domestic Policy Reform I: Health, anti-poverty, labour, education, immigration and environment

# 2 Health reform in the Age of Trump

**Thomas Buchmueller and Helen Levy**
University of Michigan

## Introduction

The Affordable Care Act (ACA), enacted in 2010, was intended to address long-standing problems with the American system of health care and health insurance. Chief among these were spiralling costs and a substantial number of individuals – roughly 50 million in 2010 – without any insurance coverage. In addition, the exclusion of employer-paid health insurance premiums from income and payroll taxes raised the spectre of inefficiency along multiple dimensions, potentially reducing job mobility and entrepreneurship while bloating the benefits offered by employers, as well as raising equity concerns about an annual tax expenditure of over $250 billion that disproportionately benefits higher-income households.

In this chapter, we review the main provisions of the ACA related to insurance coverage and healthcare costs, including what is known so far about their impact. We also discuss the recent Republican attempt to 'repeal and replace' the law, which would have reduced and restructured both the ACA's subsidies for the purchase of private health insurance and the Medicaid programme while eliminating many of the ACA's taxes, largely benefiting the highest-income taxpayers. Although this proposal failed, it is unlikely to be the Republicans' last attempt to dismantle the ACA; it thus provides useful insight into the views of the ACA's opponents. We conclude by discussing ongoing challenges that face the US healthcare system.

## ACA coverage provisions

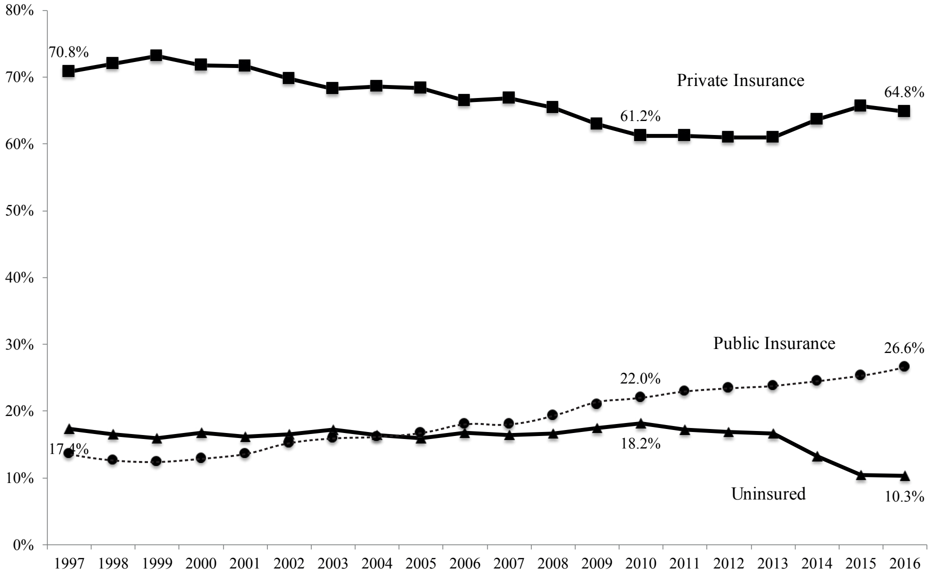
The ACA took a three-pronged approach to expanding coverage: mandating increased access to employer-sponsored coverage for young adults, expanding Medicaid to all non-elderly adults with very low income, and reforming the non-group health insurance market for those without access to employer-sponsored or other coverage.

- The ACA young adult coverage provisions, which took effect shortly after the law was enacted in 2010, require employers who offered dependent coverage to make that coverage available to workers' children up to the age of 26.
- The ACA Medicaid provisions were intended to expand the programme from one primarily benefiting children and parents in low-income families to one that would reach very low-income *childless* adults as well, beginning in 2014. Constitutional challenges from multiple states, however, led to a June 2012 Supreme Court decision rendering this expansion effectively optional. As of April 2017, 31 states have expanded Medicaid, while 19 have not.
- The ACA nongroup market reforms, which took effect in 2014, are intended to promote competition by establishing regulated competition in a market that had long been hobbled by adverse selection. Insurers can no longer deny coverage or charge consumers higher prices on the basis of health status; premiums charged to older beneficiaries may not be more than three times what younger beneficiaries pay; and policies must cover a specified set of 'essential benefits'. Low- and middle-income beneficiaries without access to employer coverage are eligible for advanceable, refundable tax credits for purchasing coverage in newly established 'marketplaces'. The tax credits are pegged to both family income and the cost of coverage in a local market. Finally, consumers without coverage face a tax penalty (the 'individual mandate') that provides an additional incentive for healthy consumers to sign up for coverage.

These coverage provisions have sharply reduced the fraction of the US population without coverage (Cantor *et al*. 2012, Somers *et al*. 2013, Antwi *et al*. 2013, Kaestner *et al*. 2015, Obama 2016, Frean *et al*. 2017, Zhao *et al*. 2017). Overall, the share of the non-elderly US population without insurance fell from 18.2% in 2010 to 10.3% in 2016 (Martinez *et al*. 2017); see Figure 1.

These gains in coverage have reduced disparities in coverage and financial barriers to care (Sommers *et al*. 2013, Buchmueller *et al*. 2016, Courtemanche *et al*. 2017); increased utilisation of services (Busch *et al*. 2014, Meara *et al*. 2014, Wherry and Miller 2016, Miller and Wherry 2017); improved household financial security (Hu *et al*. 2016); and reduced hospital uncompensated care (Nikpay *et al*. 2015, Dranove *et al*. 2016, Blavin 2016). Moreover, despite some concern that the ACA would reduce labour supply or undermine the provision of employer-sponsored coverage, there is no evidence to date that this has been the case (Abraham *et al*. 2016; Gooptu *et al*. 2016; Kaestner *et al*. 2015; Leung and Mas 2016; Levy *et al*. 2016).

**Figure 1.** Trends in insurance coverage for non-elderly Americans, 1997-2016




*Notes:* Data are from the National Health Interview Survey as reported by Martinez and Cohen (2011) and Martinez *et al.* (2017). Figures represent the percentage of individuals with each type of coverage at the time of the survey. Public insurance includes Medicaid, CHIP, state-sponsored or other government-sponsored health plan, Medicare, and military plans. Private insurance includes plans obtained through an employer, purchased directly or purchased through local or community programmes. Because respondents can report multiple sources of coverage, the figures for a given year add up to more than 100%. The data for 2016 pertain to the period January to September. In all other years, the estimates are based on surveys conducted throughout the year.

## ACA cost control provisions

The ACA was intended to control costs in two senses: first, by reducing (or at least not increasing) the deficit as projected by the nonpartisan Congressional Budget Office (CBO), which was critical to the ACA's political viability; and second, by introducing a variety of policies aimed at changing economic incentives in the healthcare system with the goal of 'bending the curve' of health spending. The ACA succeeded in the first sense, more than paying for the increased spending associated with the ACA's new programmes through cuts to existing programmes (primarily Medicare payments to providers and insurers) and increases in taxes (primarily on very wealthy individuals) over the initial ten-year window scored by the Congressional Budget Office (CBO 2010).

At this early stage, it is less clear whether the ACA is succeeding in bending the curve of health spending. The ACA introduced a number of programmes to move the Medicare programme away from fee-for-service payments and toward reimbursement systems that better align provider incentives to provide high-value care, such as the shared savings/accountable care organisation programme and bundled payments for certain services. It is also true that the implementation of the ACA coincided with a period of historically low growth in US health care spending (Council of Economic Advisers 2016); the jury is still out on whether the ACA programmes are, in fact, reducing spending (Doran *et al*. 2016, McWilliams *et al*. 2014, 2015, 2016, Nyweide *et al*. 2015).

One ACA provision that is of particular interest to economists is an excise tax on high-cost employer-sponsored health insurance plans. This 'Cadillac tax' was designed not only to raise revenue, but also to give employers an incentive to consider more efficient benefit designs, and can be seen as a somewhat more politically feasible alternative to limiting the exclusion of employer-paid premiums. Nonetheless, the Cadillac tax remains in political limbo, having been postponed until at least 2020.

## Repeal and replace, part I: The American Health Care Act of 2017

In March 2017, Donald Trump and Congressional Republicans moved quickly to make good on their promise to ‘repeal and replace’ the ACA. House Republicans drafted the American Health Care Act of 2017 (AHCA), which proposed major changes to the design of the ACA’s tax credits and to Medicaid.

Like the ACA, the AHCA included advanceable, refundable tax credits for the purchase of private health insurance. But whereas the ACA’s tax credits are based on income and the cost of coverage, so that most consumers are effectively insulated against large premium increases, the AHCA’s tax credits varied only with age, with older consumers getting slightly larger credits.

At the same time, the AHCA would have relaxed the ACA’s restriction on charging older consumers higher premiums, so the net impact would have been to raise premiums for older consumers, lower-income consumers, and those living in high-cost areas.

The AHCA would have made even larger changes to the Medicaid programme, changing it from an entitlement for which the financing is split between the Federal government and the states to essentially a ‘block grant’ model.

The CBO projected that the AHCA would cause the number of Americans without health insurance to increase by 18 million in the first year the policy was in place. By 2026, after the elimination of the ACA Medicaid expansion and of subsidies for insurance purchased through the ACA marketplaces, that number would increase to 32 million (CBO 2017).

The AHCA can be seen as an attempt to find a middle ground between hard-line conservatives who wanted to repeal the ACA outright and more moderate Republicans who were uncomfortable returning to the pre-ACA *status quo*. At the time of this writing, the Republican leadership is working to find this middle ground. In March, they chose not to put the bill to a vote when it became clear that it would not pass. In May the bill was modified to make certain parts less objectionable to conservatives, and other parts less objectionable to moderates. Whether this compromise will attract sufficient support in the Senate remains to be seen.

## What's next?

The Trump administration and Republican leaders in Congress must now decide what chapter they will write in the ongoing book of health reform. They may interpret this assignment narrowly or broadly.

A narrow interpretation would lead them to focus on the question 'what should we do about the ACA?' On this question, there are three paths they might take.

The first is to continue trying to craft major reforms to repeal and replace the ACA. The experience with the AHCA suggests that this will be a very challenging task politically.

A second path would be to eschew major legislation in favour of quietly starving the ACA, for example by refusing to actively encourage insurers and individuals to participate in the marketplaces and discouraging additional states from expanding Medicaid. Since Republicans took control of Congress in 2011 they have claimed to be pursuing the first path, introducing numerous bills to repeal or replace the ACA. However, since there was no chance of this legislation being enacted with President Obama in the White House, these bills were political statements rather than serious legislation. As a result, their actual strategy was more along the lines of the second path.

A third path would be to acknowledge that the ACA, from an economic perspective, already represents a moderate, market-based approach to providing coverage to tens of millions of Americans, and to assume a role of stewardship for making these programmes work. This would involve fully funding cost-sharing subsidies for low-income households in the marketplaces (currently under legal attack by House Republicans); enforcing the individual mandate; extending and funding a federal reinsurance programme in order to encourage private insurers to remain in the marketplaces; and working with the 19 states that have not expanded Medicaid to find approaches they can embrace, building on the success of Republican-led states like Michigan and Ohio that have expanded Medicaid coverage through waivers.

There is, however, a broader view that this Administration might take on health reform. This broader view would require them to move beyond the current focus on the ACA to consider the problems the ACA was intended to solve.

The Administration might, for example, try to do more to address the long-run cost problems facing the Medicare and Medicaid programmes. Ideally this would be achieved not simply by pushing costs onto beneficiaries or state governments, but would also include a search for solutions that yield higher value for the government's dollar. These solutions might involve the private provision of publicly-subsidised coverage - as in the ACA's health insurance marketplaces, Medicaid managed care, or the Medicare Advantage programme - or they might involve the design of better provider payment models for publicly provided coverage, as in the ACA's Medicare Shared Savings Program.

The broader view might also include an effort to impose some order on the complex tax treatment of private health insurance. The current patchwork system involves a regressive exclusion for employer-provided coverage, progressive refundable credits for marketplace coverage, and a politically unstable excise tax on high-cost employer plans to be implemented at some future date.

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## About the authors

**Tom Buchmueller** is a health economist who is an expert on the economics of health insurance and related public policies. Professor Buchmueller also holds an appointment in Department of Health Management and Policy in the School of Public Health and is on the Institutional Leadership Team of the University's Institute of Health Policy and Innovation. He is a Research Associate of the National Bureau of Economic Research and an elected member of the Board of Directors of the American Society of Health Economists. In 2011-12, he served as the Senior Health Economist at the White House Council of Economic Advisers.

**Helen Levy** is a Research Professor at the University of Michigan's Institute for Social Research, Gerald R. Ford School of Public Policy, and School of Public Health. She is a Co-Investigator on the Health and Retirement Study, a long-running longitudinal study of health and economic dynamics at older ages. Her research interests include the causes and consequences of lacking health insurance, evaluation of public health insurance programs, and the role of health literacy in explaining disparities in health outcomes. Before coming to the University of Michigan she was an Assistant Professor at the Harris Graduate School of Public Policy Studies at the University of Chicago. She is a Research Associate at the National Bureau of Economic Research and served as a Senior Economist to the President's Council of Economic Advisers in 2010-11. She received a Ph.D. in economics from Princeton.

# 3 Promoting economic security and upward mobility with programmes that support low-income families and youth

**Melissa S. Kearney**
University of Maryland and NBER

President Donald Trump appealed to the populist sentiment of the many Americans who feel left behind by economic forces and societal changes. Over the past four decades, increases in US wealth have not been equally shared across the income distribution. For individuals without high levels of skill and education, wages have stagnated and employment rates have fallen. It is also, increasingly, more difficult for children to achieve higher levels of income than their parents and the fabled 'American Dream' is under threat.[1]

Delivering widespread economic security requires domestic policies that enhance human potential so that a larger share of the population can participate productively in the workforce and achieve economic success. Greater policy focus is needed on the lowest income Americans to ensure that more children have the opportunity to thrive in today's modern global economy, especially children born into economically disadvantaged families.

The Trump administration faces a critical moment in American history. What is needed is a re-invigorated system of anti-poverty programmes, designed to effectively address both the disadvantageous circumstances and the basic needs of low-income families and children.

1 See Chetty *et al.* (2016).

This means providing low-income youth with pathways to success, including opportunities for skill attainment and labour market preparedness, along with reasons to believe that they can 'make it' despite an increasingly unequal society. It means providing low-income rental housing assistance to families, so that children can live in safe neighbourhoods with positive community attributes. It requires guaranteeing that all children have adequate nutrition and health care so that they can thrive and prosper in school and, ultimately, in adulthood.

Only with a strong set of support programmes and targeted interventions will the United States be able to thwart intergenerational poverty, renew the promise of equal opportunity, and foster shared prosperity.

## Income class divisions have been rising

A preponderance of statistics shows sizeable income gaps associated with the experiences and achievements of children born into families at the top and bottom of the income distribution. A simplified, but not misleading, version of facts is as follows: highly-educated, high-income individuals are marrying one another and showering terrific advantages on their children. Individuals at the bottom of the distribution are increasingly likely to be out of work and unmarried, and children born into these families are starting out life far behind their higher-income peers, growing up with a heightened likelihood of dropping out of school, engaging in criminal activity, and living in poverty and/or relying on government assistance as adults.

Researchers from a range of disciplines and ideologies provide evidence to support this story of an erosion of equal opportunity and a likely decline in rates of economic mobility.

Over a decade ago, Princeton sociologist Sara McLanahan called attention to the 'diverging destinies' of children from low-income, often single-parent, homes, and their more economically advantaged peers (McLanahan 2004). This theme was echoed forcefully in Harvard policy professor Robert Putnam's 2015 *Our Kids: The American Dream in Crisis*, which documents a widening class-based 'opportunity gap'.

The 2013 book *Coming Apart,* by conservative political scientist Charles Murray, documents that recent decades have seen such a widening class divergence in basic norms and behaviours that educational classes now essentially live in different cultural spheres from one another.

## Growing up poor in an unequal society can lead to poverty traps

Children born into economically disadvantaged circumstances have lower rates of educational attainment and worse adult economic outcomes than their more advantaged peers. But, new research shows that the consequences of background economic disadvantage are even worse for children living in more unequal places. A critical lesson drawn from this research is that that, on average, youth from lower income families are responding to wider income class divides by dropping out of school and becoming young parents at higher rates, effectively impeding their chances of upward economic mobility and success.

A pair of recent papers show that there are pernicious interaction effects between growing up in a low-socioeconomic status (low SES) family and living in a more unequal city or state (Kearney and Levine 2014, 2016). Specifically, girls from low SES homes are more likely to become young, unmarried mothers and low SES boys are more likely to drop out of high school, if they live in a city or state where the gap between the bottom and middle of the income distribution is greater. The fact that low SES boys respond to greater levels of income inequality by dropping out of school more often is consistent with a growing body of evidence suggesting that boys are especially likely to suffer in school and the workforce when they grow up in single-mother homes (Bertrand and Pan 2013, Autor *et al*. 2015) or in economically disadvantaged communities (Chetty *et al*. 2016).

These empirical findings are consistent with a model of 'economic despair', whereby a persistently wide gap between the bottom and middle of the income distribution has a negative effect on low-SES youth's investment in their own economic future, perhaps because they come to doubt their own ability to succeed in society.

Importantly, in empirical models that examine potential mediating factors, the data reject the hypotheses that any readily-identified policy factor, including school financing or measures of school inputs, is responsible for the relationship. This implies that there is something more pervasive and less tangible about the economic environment in which these children are growing up and that this is shaping their attitudes and ultimately their decisions in consequential ways.

This work has important policy implications regarding the types of programmes needed to improve the economic trajectory of children from low-SES backgrounds. Interventions would focus on improving both the actual and perceived return to investing in human capital for them. For example, programmes offering high school students dedicated pathways to careers – such as apprenticeship programmes, employment programmes, or college-preparatory programmes – would increase the return to staying in school as well as potentially improve the student's perception that economic success is attainable for them. Other such interventions might take the form of mentoring programmes that connect youth with successful adult mentors and school and community programmes that focus on establishing high expectations. They could also take the form of early-childhood parenting programmes that work with parents to create a more nurturing home and engender pro-social behaviours.

There are many programmes with documented evidence of success. While a thorough review of such evidence is outside the scope of this chapter, the collection of research in Kearney and Harris (2014) includes a number of specific evidence-based policy proposals focused on improving the life trajectory of disadvantaged youth. Specific proposals include expanding preschool access, promoting positive parenting practices, designing effective mentoring programmes, expanding summer youth employment opportunities, and expanding apprenticeships in the United States. In addition, there are a handful of recent academic papers, based on research demonstration projects of the University of Chicago Urban and Crime Labs, that document very promising results from programmes that assist disadvantaged youth from the city of Chicago, including programmes that offer intensive tutoring, Cognitive Behavioural Therapy, and summer jobs (see Heller 2014, Heller *et al*. 2017, Cook *et al.* 2014).

## Childhood neighbourhood has lasting effects on lifetime outcomes

These ideas are consistent with the most recent set of results coming out of the Moving to Opportunity (MTO) experiment, that make it clear that improving the neighbourhood in which a child grows up can have sizeable positive effects on lifetime outcomes. MTO was a research demonstration project implemented by the US Department of Housing and Urban Development (HUD) between 1994 and 1998 in five large US cities. The programme randomly assigned approximately 4,600 families living in high-poverty public housing projects to one of three groups: an experimental group that was offered a subsidised housing voucher that came with a requirement to move to a low poverty census tract; a Section 8 voucher group that was offered a standard housing voucher with no additional requirements or counselling; and a control group. The research results from the first generation of MTO movers provided little evidence that moving to a low-poverty neighbourhood led to noticeable improvements in adult economic outcomes or teenager's educational attainment (Kling *et al*. 2007).

More recent long-term evidence from Chetty, Hendren, and Katz (2015) reports on the adult outcomes of the children who moved as part of the MTO demonstration. The data indicate that children who were below the age of 13 when their families moved experienced higher college attendance rates and ultimately received higher wages as adults. They are also less likely to be single parents. No such benefits are found for children who moved at older ages. These results imply that early childhood exposure to better neighbourhoods and more advantaged peer groups alters a child's life trajectory, with lasting beneficial effects through adulthood. This could be due to actual opportunities experienced in these better neighbourhoods, or it could be because growing up in a better place shapes a child's perception of him or herself and their place in society. A key policy implication from this newest MTO study is that housing-based assistance that enables families with children to move from high-poverty neighbourhoods to lower-poverty areas results in long-term economic benefits.

To reduce intergenerational poverty, foster economic security, and advance upward mobility, one immediate and partial policy solution would be to dramatically expand the provision of low-income housing assistance.[2] This would allow federal housing assistance programmes to serve more families and increase stipends that enable families to move into more expensive and objectively better neighbourhoods. This would require an increase in the budget of the Department of Housing and Urban Development (HUD).

Unfortunately, the President's 2018 budget requests only $40.7 billion in gross discretionary funding for HUD, which is $6.2 billion (13.2%) *less* than the 2017 spending level. The skinny budget document suggests that the budget would maintain roughly $35 billion for HUD's rental assistance programmes to continue to assist '4.5 million low-income households', while shaving $35 million from funding for Section 4 Capacity Building for Community Development and Affordable Housing.

A bit of programme background is useful here. There are a few main programmes through which the federal government assists low-income families with housing needs. The largest is the Section 8 Housing Choice Voucher (HCV) programme, which provides federally funded portable vouchers to individuals, which they can use to pay rent on units of their choosing that meet basic suitability requirements in the private market. In general, Section 8 recipients are required to pay 30% of their own income toward rent. The CBO (2015) reports that this programme spent $18 billion in 2014.

Other programmes, with smaller annual spending budgets, include project-based rental assistance, which provides for federally contracted and subsidised rent in designated privately-owned and operated buildings; public housing, which makes federally subsidised apartment units available for low-income households in buildings that are publicly owned and operated; and grants to state and local governments for other housing programmes.[3] The federal government also offers a tax credit to real estate developers who build affordable housing, the Low-Income Housing Tax Credit (LIHTC).

2 This is the minimum level of policy intervention necessary to address residential income segregation and poverty concentration. A more ambitious approach would involve addressing zoning, as well as the organisation of the US public school system into neighbourhood boundary schools. These issues are outside the scope of this essay.

3 The CBO (2015) report is available on-line: https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/50782-lowincomehousing-onecolumn.pdf.

The Joint Committee on Taxation (JCT) reports that this credit accounted for $7 billion in tax expenditures in 2014. It is generally understood that this indirect way of providing housing assistance to low-income families is much less cost-effective than the housing choice voucher programme (see Olsen, 2017).

To put these budget numbers into perspective, contrast the roughly $18 billion annual expenditures on rental-assistance vouchers with the $95 billion in annual tax expenditures in 2016 attributed to tax deductions for mortgage interest payments and property taxes.[4] To the best of my knowledge, there is no credible evidence that this tax deduction increases rates of homeownership or yields any measurable benefits to communities. Rather, it subsidises leveraged home purchases (typically expensive home purchases) and disproportionately benefits high-income households.[5] It is hard to come up with a budget or societal justification for maintaining this level of housing-related financial assistance for high income home-owners while perennially underfunding housing-assistance programmes for low-income families.

## Safety net support early in life has long-term benefits for low-income children

The research described immediately above demonstrates that improving the neighbourhood that children experience early in life can lead to improved economic outcomes through adulthood. Relatedly, another set of academic papers has documented that access to basic safety net programmes during early childhood leads to improved adult economic outcomes for low-income children. Almond *et al*. (2016) document the long-term effects of having access to food stamp benefits during early childhood by exploiting county-level variation in the programme roll-out during the 1960s and 1970s. They find that low-SES children who lived in counties with the food stamp programme had better health outcomes in adulthood (including a lower incidence of metabolic syndrome and self-reported good health status) as compared to low-SES children in counties without the programme.

4 https://www.treasury.gov/resource-center/tax-policy/Documents/Tax-Expenditures-FY2017.pdf

5 Tax Policy Center calculations of the distribution of these tax benefits available on-line: http://www.taxpolicycenter.org/model-estimates/individual-income-tax-expenditures-july-2016/t16-0165-tax-benefit-deductions-home

In addition, there are now multiple rigorous studies documenting long-term benefits for low-income children who had access to Medicaid health insurance during their early years as compared to low-income children who lived in states with more restrictive eligibility. Specifically, Cohodes *et al*. (2016) document a positive impact on educational attainment; Wherry and Meyer (2016) document decreased mortality for teens, blacks in particular; and Brown *et al*. (2015) and Goodman-Bacon (2016) document greater earnings and less reliance on government transfers during adulthood.

Taken as a whole, this research demonstrates that US programmes addressing basic food, nutrition, and child health insurance yield long-term benefits. This is consistent with substantial evidence from the medical and psychology literatures, showing that early-life deprivation has lasting negative effects on an individual's health, and consequently, on their ability to be productive members of the labour force and society.

Whether the current administration and Congress will sustain federal funding for these critical safety net programmes is unclear. Proposals to block grant both the Supplemental Nutritional Assistance Program (SNAP, formerly the food stamp programme)[6] and Medicaid[7] threaten to undermine the critical safety net feature of the programmes. Currently these programmes are entitlement programmes, meaning that if an individual meets the eligibility requirements, they have access to benefits. This is in contrast to programmes like low-income housing rental assistance or child care subsidies, where insufficient programme funds mean that millions of eligible families are placed on multi-year-long waiting lists, potentially never receiving programme benefits.

6 SNAP is a means-tested transfer programme with eligibility determined by a household's financial resources. Households with gross monthly income below 130% of the federal poverty line, and less than $2,250 in countable assets are eligible to receive vouchers to buy unprepared food in most grocery stores. In 2014, SNAP provided benefits to 46.5 million people at a cost of $74.6 billion (USDA 2016). SNAP is the second largest anti-poverty programme for children in the United States, behind the Earned Income Tax Credit (EITC), and the third largest for adults, behind the EITC and Social Security (Hoynes, 2016).

7 Medicaid is the largest means-tested transfer programme in the United States, providing health insurance coverage to low-income families, seniors, and disabled adults. It is jointly funded by the federal government and state governments. According to a Congressional Budget Office (2013) document, in 2012, federal spending for Medicaid was $251 billion and in 2011 states spent an additional $160 billion on Medicaid. The CBO estimates that average Medicaid enrollment over the course of a year is about 57 million individuals.

To turn the federal SNAP and Medicaid programmes into block grants awarded to states would mean that families will not necessarily have access to the programme benefits when their economic conditions worsen. Research has documented that with the change of cash welfare from the entitlement programme Aid to Families with Dependent Children (AFDC) to the block grant programme Temporary Assistance to Needy Families (TANF), caseloads were much less responsive to the economic downturn (Bitler and Hoynes, 2016). In other words, when economic conditions worsened, the so-called safety net programme did not expand.

In contrast, the SNAP programme is the quintessential safety net programme, with programme expenditures rising during economic downturns and falling during strong economic conditions (Hoynes, 2016). To undermine the basic safety net features of these critical programmes that promote the long-term health and human potential of low-income individuals would be counter-productive to the goals of advanced economic security and upward mobility.

## Concluding remarks

In summary, rigorous academic research shows that improving the childhood environment of economically disadvantaged youth and providing for basic housing, health, and nutrition needs of low-income families advances economic security and upward mobility. A sustained, and ideally strengthened, system of federal anti-poverty programmes would make it possible for more children to succeed in school and become productive workers in adulthood. However, a look at the ‘skinny budget’ put forward by the Trump Administration, along with the rhetoric from some key Congressional leaders, suggests weakened support for programmes that provide assistance to low-income families and children. Given the economic and social challenges facing the United States today, such policy changes would move the nation in exactly the wrong direction. They would further advance the separation and segmentation of society and thrust those born into families at the bottom of the income distribution into the grips of inter-generational poverty.

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## About the author

**Melissa S. Kearney** is a non-resident senior fellow at the Brookings Institution and a Professor in the Department of Economics at the University of Maryland. She is also a research associate at the National Bureau of Economic Research (NBER), a faculty affiliate of the Notre Dame Lab for Economic Opportunities (LEO), and an affiliated scholar of J-PAL. Past positions include director of the Hamilton Project at Brookings, Mellon Fellow at Brookings, and assistant professor at Wellesley College. Kearney's research focuses on issues of social policy, poverty, and inequality and has been published in leading economics journals. Kearney received her Ph.D. in Economics from the Massachusetts Institute of Technology in 2002 and her B.A. from Princeton University in 1996. She studied on a National Science Graduate Research Fellowship and a Harry S Truman Scholarship.

# 4 Globalisation and US labour markets

**Mine Zeynep Senses**
Johns Hopkins University

Most Americans agree that some trade is good. It would be a shame, after all, if Alaskans could not eat mangoes just because they happen to have settled in a location where it is impossible to grow them. Public debate on the virtues of trade gets more contentious when the discussion turns to goods that are no longer – or that are increasingly less likely to be – produced in the United States, such as textiles, toys, furniture and cars.

Most economists emphasise that trade is a win-win for all countries that participate. Trade, the argument goes, improves welfare, benefiting consumers by lowering prices and by increasing the variety of available goods. Overall productivity improves as each country moves away from producing goods that they are, relatively, not competitive in and towards goods in which they are. Thanks to trade, consumers can buy fuel-efficient Toyotas, sporty BMWs, or large Ford SUVs – and pay a fraction of the cost that they would for 'Made in America' toys, furniture and textiles by buying cheaper versions imported from Mexico, China or Vietnam. Trade frees the economy's workers, capital, and land to specialise in what they are really good at – in the case of the United States, advanced manufacturing goods, like robots and planes, or services, like banking, insurance and software.

Economists have long-acknowledged, however, that the benefits of trade are unevenly distributed across different segments of the population, and that the destruction and expansion of industries that accompanies trade bears its own risks and costs. Until recently, however, the economic consensus was that these transition costs were likely small, and the gains were large enough to compensate for the losses that some do suffer.

Then came China, with its large population, solid infrastructure, and extraordinary economic growth. China transformed rapidly, moving from 1% of the world GDP in 1980 to 20% in 2010. China's accession to the WTO in 2001 locked in access to the US market at low tariff rates, especially in unskilled-labour intensive industries. Importantly, this status also reduced the threat of future protection levied on imports from China, making firms more comfortable with moving some or all of their production to China.

The rapid entry of a large export-oriented country onto the world scene had more severe consequences for American workers and communities than previous globalisation episodes. The outcome has shifted economists' focus away from the overall gains from trade, towards quantifying the speed of the adjustment process and distributional consequences. The findings so far suggest a slow transition process involving large and concentrated losses for some workers and their communities.

During the 1990s and 2000s, the American industries competing with China experienced more factory shutdowns and lower employment growth in factories that survived, relative to less-exposed industries (Bernard *et al*. 2006). Workers employed in these industries saw lower earnings (Autor *et al.* 2014) and higher uncertainty associated with these earnings (Krishna and Senses 2014), relative to workers employed in industries facing less direct competition. While high-skilled workers in these sectors – such as lawyers, HR specialists, and administrative staff – were able to transition to other industries without much loss of earnings, less educated and lower-wage workers bore the brunt of the impact. Some of these workers received federal social assistance in the form of Unemployment Insurance, Medicaid, Medicare, Supplemental Nutrition Assistance Program, Temporary Assistance for Needy Families or Trade Adjustment Assistance. Nevertheless, these benefits fell far short of making up for the severe losses they experienced.

Where a community lost manufacturing jobs, the impact was not limited to the wages and job security of low-skilled factory workers but also extended to non-manufacturing employment in these areas (Autor *et al*. 2013). When customers have less money to spend, either because they have lost their job or because their level of economic insecurity has increased, local stores, restaurants, barber shops and other businesses also suffer.

The fortunes of a manufacturing factory are further connected to other industries through its supply chain. If a factory that produces furniture shuts down, the adverse consequences spill over to suppliers of wood, plastic laminate, plywood, metal, iron and machinery, and on to companies that store, transport and sell the furniture.

Local governments can play an important role by investing in public services, such as high quality education and infrastructure, to ensure the competitiveness of workers and firms in their community. The problem is that funding for these public services is highly localised in the US, with a heavy reliance on property and sales tax revenues. Therefore, a decline in the level of local economic activity depresses tax revenues and restricts the ability of local governments to fund public services, precisely at a time when this support is most needed. The outcome is the deterioration of public services that further exacerbates the negative income shock – less spending on public housing, welfare and public transport, higher (property) crime rates, and lower quality schools (Feler and Senses 2017).

Adverse labour market outcomes faced by individual workers, who are in most cases already at the bottom end of the education and wage distributions, and the decline of economic opportunity in their communities, often brings profound personal consequences. A decline in manufacturing decreases the wages of men relative to women, which in turn reduces their attractiveness as marriage partners – the outcome is a plunge in marriage and fertility rates in the hardest hit communities (Autor *et al.* 2017). There is also evidence of worse health outcomes and higher mortality rates (Pierce and Schott 2016), and an increase in the number of children born out of wedlock and to teens.

Two very important caveats are missing from this particularly bleak narrative. First, none of these findings suggest that freer trade does more harm than good. None of the studies mentioned above account for benefits of trade, not only to consumers in the form of lower prices and more variety, but to firms in services and in advanced manufacturing that benefit from access to the world market by exporting their products and by importing cheap inputs, machinery and raw materials. A decline in prices of tradable goods and a decline in housing prices in exposed localities, at least partially, will curtail the impact on purchasing power.

Second, while trade has been a contributor to these negative trends, especially during the 2000s, by no means has it been the primary contributor. Automation of jobs by computers and robots, although less prone to producing zingy one-liners for politicians than trade with China and Mexico, had a much bigger impact on the adverse economic outcomes that factory workers without a college education have experienced. It's plausible that even jobs whose elimination could directly be linked to China's WTO accession would have eventually been replaced by machines instead of by Chinese workers. Fast food CEO and former Labor Secretary nominee Andy Puzder recently described why in an interview with Business Insider: '[Machines are] always polite, they always upsell, they never take a vacation, they never show up late, there's never a slip-and-fall, or an age, sex, or race discrimination case' (Business Insider 2016). It is unlikely that policies to reverse the trend in which manual labour jobs are replaced by cheaper, faster, and more efficient robots, would gain much traction in Washington.

Alas, with such a bleak economic backdrop, nuanced discussion of trade's pros and cons does not resonate, especially in election years. There is some evidence that communities hit hardest by globalisation have shifted away from centrist candidates towards ideologically extreme candidates in the most recent US election. The shift took place in both ends of the political spectrum: more moderate Republicans were replaced by more conservative candidates and more moderate Democrats by more liberal candidates (Autor *et al*. 2016). Now, the question is: what policies will these officials – who were elected on a promise of turning the tide of globalisation away – implement? And what is the prospect of success for these policies?

Initial signs are worrying. President Trump consistently promised, on the campaign trail, to restrict trade. This will hurt American consumers, in particular those with low incomes, as they spend a greater percentage of their income relative to their richer counterparts on the kind of goods that have declined the most in price, thanks to trade (Fajgelbaum and Khandelwal 2016). They will end up paying more for 'Made in America' versions of products previously imported from other countries. This policy will almost certainly trigger retaliation by trading partners, which will result in lower demand for American exports and possibly lead to a global slow-down. Additionally, given the interconnectedness of US and Chinese economies, policies that restrict trade with China will disrupt the supply chains of many American firms which rely heavily on cheap intermediate inputs and raw materials from China.

So far, the only policy implemented on this front is tearing up the Trans-Pacific Partnership (TPP) – a 12-nation trade deal negotiated by President Obama – to which China was not a signatory country. This was an act vigorously supported by the Chinese, as it has the potential to replace Americans with their Chinese counterparts in setting up the rules of the trade relations in Asia.

Importantly, even if Trump's protectionist policies are implemented and manufacturing companies are successfully incentivised to move back to the US, their new factories are more likely to look like the BMW plant in Spartanburg, SC than a 1970s Ford plant in Detroit, MI – that is, located in a Southern right-to-work state without much regulation, with a factory floor populated not by blue-collar workers but by robots and a few relatively high-skill and high-wage workers who are machine operators, technicians and engineers. This is unlikely to help the plight of workers living in trade-impacted communities elsewhere.

Instead of trying to reverse the trends in globalisation and technological development at the expense of the communities, firms, workers, and consumers who benefit from these trends, a more productive approach would involve reducing the harm to those who lost their livelihoods during this process.

First, a well-functioning and adequately funded set of social safety net programmes would buffer against some of the losses faced by these workers and ease their transition to new employment outside their industries. Expanding eligibility criteria and increasing the generosity of temporary assistance programmes such as Unemployment Benefits, Supplemental Nutrition Assistance Program and Temporary Assistance for Needy Families would help cushion the initial blow of a job loss.

Second, while a short-term cushion is important in an environment in which trade shocks are more frequent, unanticipated, and harder to insure against, policies that get people back to work as soon as possible are preferable.

This is not only because of the efficiency losses due to unemployment, but because a job is more than just a paycheck for many workers – it helps create a sense of purpose, provides an often-needed structure, gives the sense of a solid place in one's community, and is a part of one's identity.

The cost of losing a job is more than just losing the financial benefits of having a job. Recent research links decline in labour force participation of men, especially of white men without a college degree, to high rates of 'deaths of despair' due to suicide and drug and alcohol abuse (Case and Deaton 2017). Retraining subsidies, federal job guarantees, wage insurance programmes, and subsidised loans for displaced workers going back to college are all policies that could help younger workers transition to new sectors that require a very different set of skills than their old job, and help older workers transition into retirement.

Third, eliminating local government policies that serve as a barrier to migration and incentivising workers to move to more prosperous communities would be beneficial. One such barrier is artificial restrictions on housing supply, like zoning laws and building restrictions that increase housing prices. These policies tend to place a heavier burden on low-income households who spend a larger share of their budget on housing.

Another barrier to mobility is occupational licensing laws. Currently, about one third of workers in the US need a state-issued license to work. The time and money cost of acquiring a license in a new state varies widely and serves as a barrier to relocating, especially for low-income households with at least one earner working in an occupation with a licensing requirement, such as a hair-dresser, make-up artist or a child-care provider.

Moving towards standardisation of the eligibility requirements for government assistance programmes, making it less onerous to transfer benefits and health insurance across states lines, and providing relocation vouchers for needy households would also incentivise workers to move away from low-opportunity communities by reducing the risk and pecuniary costs associated with moving.

The current administration has so far shown little appetite for expanding government social safety nets and easing the transition cost for displaced workers. One of the first legislative actions of the Trump administration was an attempt to repeal the Affordable Care Act – a system designed to insure low-income families and provide an important buffer against loss of employer-provided health insurance following a job loss.

Similarly, Trump's first budget plan involves deep cuts across government agencies and eliminates many federal programmes that assist the poor (Low-Income Home Energy Assistance, Community Development Block Grant Program, Section 4 Capacity Building for Community Development and Affordable Housing Program, to name a few) and programmes that support education and training (21st Century Community Learning Centers Program, Federal Supplemental Educational Opportunity Grant Program, Striving Readers Comprehensive Literacy Program and the Senior Community Service Employment Program). Also, there is a government-wide hiring freeze in place that is likely to make the implementation of policies already in place more difficult.

One area where there is some possibility of reform is the reduction of existing regulations. If some of these reforms serve to reduce barriers to mobility across localities, they have the potential to speed up the adjustment process. However, it is unlikely that this will be enough to end the 'American carnage' that President Trump described in his inaugural speech.

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## About the author

**Mine Z. Senses** is an Associate Professor of International Economics in the School of Advanced International Studies (SAIS) at Johns Hopkins University. Her current research focuses on the consequences of globalisation on the labour market, with emphasis on quantifying the heterogeneous costs and benefits experienced by different segments of the population. In particular, her recent work investigates the association between trade and income risk; differential effects of trade on the wages of workers employed in heterogeneous firms; the role of human capital in determining the wage impact of increased openness and the interplay between globalisation and the size and role of local governments. Her research has been published in numerous journals including the *Review of Economic Studies*, J*ournal of International Economics, American Economic Review* and the *Canadian Journal of Economics*. She holds a BA from the Middle East Technical University and a PhD from the University of Michigan.

# 5 The future of regulation in the for-profit college sector

**Jordan Matsudaira**
Cornell University

The quality of the US higher education sector, once considered nearly unassailable, has been called to task. State disinvestment and a corresponding transfer of costs to students – manifest in increasing levels of student debt – have led to increased scepticism over the value of a college degree. In turn, this has led policymakers to amplify calls for accountability for colleges and universities so that they demonstrate they are producing returns on public investments. An increasing number of states are introducing performance-based funding, tying state disbursements of aid to measures of performance; the Obama Administration in 2013 proposed tying eligibility for student aid programmes to institutional performance metrics, before backing away; and risk-sharing policies, requiring institutions to bear responsibility for a fraction of the federal loan dollars their students default on, are currently being debated.

The most important accountability measure in US higher education in recent years, however, is undoubtedly the Gainful Employment (GE) regulations finalised by the Obama Administration in 2014. These policies apply to all programmes operated by for-profit colleges, and non-degree programmes at public and not-for-profit institutions. They were motivated by the perception that many such programmes were harming their own students by leaving them with high levels of debt and too little acquired human capital to increase their earnings capacity enough to justify the programmes' cost. These regulations were controversial and fought by both industry – in several court challenges – and Congressional Republicans who proposed legislative riders to withhold funding for the enforcement of the GE provisions.

What does the future hold for this set of regulations under the Trump Administration? The incoming Education Secretary Betsey DeVos declined to say that she would enforce the regulations, during her confirmation hearings. Moreover, as Secretary DeVos is an investor in for-profit education and President Trump himself owned a for-profit university, the new Administration is expected to soften or dismantle altogether the existing regulations. Indeed, markets have already priced in an anticipated change in regulatory climate: the stock prices of major for-profit chains increased dramatically both on Election Day and after, despite falling enrolments in recent years (Dynarski 2016).

This chapter provides a brief overview of the evidentiary base for regulating the for-profit sector and a discussion of directions for regulatory reform.

## Background

For-profit colleges have a long history in the United States, and some of the largest chains, such as Everest College and Strayer University, began as trade schools more than 100 years ago (Deming *et al*. 2012). There is great heterogeneity in the sector. Most institutions are small schools offering vocational certificates, with less than two hundred students, but the largest schools – generally chains with large online enrolments – enrol the majority of students. University of Phoenix alone enrolled over 200,000 students in 2013, accounting for 13% of the sector.[1] Since 1970, for-profit enrolment has been fairly low – never rising above 3% of total US college enrolment until recently. But between 2000 and 2010, fall enrolments more than tripled, compared to growth of about 28% among all institutions (Digest of Education Statistics 2015).

This rise in enrolments coincided with increasing reports of abuse of federal student aid in the sector, and suspicions that many programmes were not preparing students for success in the labour market. While students from for-profit colleges accumulate higher levels of debt due to higher tuition prices, their labour market earnings after enrolment were low and the rates of default on their loans were demonstrably higher (Deming *et al*. 2012, Looney and Yannelis 2015).

1 Where not otherwise noted, data are from the 2013 IPEDS survey.

Increasing concerns over these trends led the Obama Administration to regulate the sector, finalising new rules in 2014 that took effect in July of 2015. The regulations define which for-profit programmes and which certificate programmes at private non-profit and public institutions lead to 'gainful employment', and are thus eligible to receive federal student aid under the Higher Education Act. Programmes are defined as leading to gainful employment if the average annual loan payments of programme graduates, about 3 years after leaving, do not exceed more than 20% of the average discretionary income (i.e., earnings above a poverty threshold), or 8% of total earnings, of graduates. In other words, the regulations defined eligibility based on the debt-burden of recent graduates – or the debt-to-earnings ratio.

While the rhetoric around the regulations sometimes referenced a goal of limiting federal assistance granted to low 'quality' programmes, the goal of the regulation is perhaps more properly seen as a consumer protection measure based on a proxy for debt manageability. That is, rather than target low quality programmes when measured in 'value-added' terms, the regulations target programmes where debt levels are unmanageable and lead to default. Based on 2013 data prior to implementation, the Department of Education estimated that 99% of the students enrolled in programmes that would not meet this standard were in for-profit programmes.

The regulations were very controversial, and were intensely opposed by industry, in measures including several court challenges. The main substantive critiques were that 1) the regulations unfairly targeted for-profit institutions since degree programmes at non-profit and public institutions are exempt from its requirements, and, relatedly, that the evidence did not support the conclusion that for-profits are lower quality; and 2) that debt-to-earnings ratios were a poor accountability metric because they depend on students' family wealth, and poorly capture a programme's 'value-added'. More generally, industry and critics alike expressed concern that the regulations would reduce access to higher education options for the low-income students concentrated in the sector by forcing some programmes to close.

## Evidence on students' outcomes in for-profit colleges

When the regulations were first drafted, early in the Obama Administration, it was clear that borrower outcomes such as delinquency and default were significantly higher in the for-profit sector. In 2009, students who borrowed at for-profit institutions accounted for about half of student loan defaults and only 11% of post-secondary enrolment. Similarly, Looney and Yannelis (2015) document higher rates of default in the for-profit sector, and suggest that the relative growth in the number of borrowers in that sector can explain (in an accounting sense) between one fourth and one half of the increase – a near doubling – in the cohort default rate between 2000 and 2011. It is not well established if debt-earnings ratios, as calculated in the GE regulations, are the best metric for targeting institutions with borrowers who default or otherwise struggle to repay their loans.

The standard for a 'gainful employment' programme, institutionalised in the GE regulations, is a low bar – the regulations target only debt affordability, rather than a measure of programme quality like the earnings gains effected by the programme, known as 'value-added'. There are two types of concerns that might be arise. First, the regulations could penalise programmes that are of high quality, if they generate substantial earnings gains (that would pass a standard present value of net benefits calculation), but serve students with low baseline earnings so their debt-earnings ratios are still high. And second, the regulations could fail to penalise programmes with zero or negative returns, if they serve students with high enough baseline earnings. Both proponents and opponents of regulating in the sector criticised the regulations for not focusing on 'value-added' instead.

Research has yet to produce definitive estimates of the returns to for-profit colleges. While several studies document lower earnings for for-profit students (Deming *et al*. 2012, Looney and Yannelis 2015), the role of student characteristics versus programme quality is less clear. An early study by Deming *et al*. (2012) used data from the Beginning Postsecondary Survey (BPS) to compare the outcomes of first-time college students attending for-profit versus other institutions who started in 2003-2004.

Students in for-profit institutions performed worse as measured by the probability of completing a degree, the amount of debt accumulated, reported satisfaction with their programme, and post-enrolment earnings, even after statistically adjusting for the lower family income background and differences in other characteristics. Still, estimates remain relatively imprecise and an analysis of the same data comparing certificate and associate's degree completers to non-completers found little difference in returns between for-profit and not-for-profit institutions (Lang and Weinstein 2013).

More recently, Cellini and Turner (2016) used administrative data from the Department of Education, linked to earnings information from the Internal Revenue Service, to estimate earnings gains for over 1.4 million students attending GE programs between 2006 and 2008. Gains to average earnings, measured 5 to 6 years post-attendance, relative to students' own prior earnings were found to be *negative* for students in certificate, associate's and bachelor's degree programmes, and across most of the major fields of study. Moreover, for certificate programmes, earnings gains for students in for-profit institutions tend to be lower than those for students in public institutions, echoing an earlier finding by Cellini and Chaudhary (2014) on a more limited sample. The fact that the time-period of the study overlaps the Great Recession and lacks a control group for many comparisons, however, suggests caution in inferring lower value-added for for-profits.

Finally, two recent experimental résumé audit studies by Deming *et al*. (2016) and Darolia *et al*. (2014) explore employer perceptions of the quality of workers who train at for-profit versus not-for-profit institutions. Deming *et al*. (2016) find that résumés with bachelor's degrees from large for-profit chain institutions are 22% (2 percentage points) less likely to receive a callback than applicants with degrees from nonselective public schools when sent to job postings that require a bachelor's degree. Both studies find no significant difference, by for-profit status of the institution attended, in call-back rates for applicants with sub-baccalaureate degrees or certificates. While these findings are consistent with employers perceiving for-profit bachelors' programmes as lower value-added, they are also consistent with employer discrimination on pre-college worker attributes that are not observed on the résumé. As such, the implications for regulatory policy are less clear.

## Conclusion

The economic case for regulating a 'quality floor' in the for-profit college sector might be motivated as a solution to a failure of market forces to pressure institutions to offer high quality education at reasonable prices (e.g., Leland 1979). Such failures may be driven by geography (too few institutional choices in an area), information asymmetries (where students cannot easily observe programme quality), or federal student aid and/or outright institutional fraud (leading to a lack of salience about prices and quality).

There seems ample evidence that for-profit colleges are more likely to produce students with higher debt burdens, who may struggle to repay their loans and default. Regulating in the name of consumer protection is therefore well-justified, and on those grounds, criticism of the lack of risk-adjustment in the current GE measures is less well-founded: e.g., it would not serve equity to allow an institution to send more students into default if its students are poorer. Moreover, concerns about detrimental effects on access may be unwarranted as Cellini *et al*. (2017) find evidence that sanctioning for-profit colleges does not reduce overall access to college, but rather redirects students to local community colleges. A less settled question is whether debt-to-earnings ratios and tax-status of the institution are the most appropriate metrics to define the floor. Recent work by Chou *et al*. (2017) suggests that repayment rates might be a more direct proxy, with the desirable feature of being more highly correlated with other dimensions of quality.

A further question is whether other measures of 'quality' would be better, or should be used in addition, to define the quality floor in the Gainful Employment regulations. Anecdotally, one response to the GE regulations has been that for-profit chains target programmes to mid-career students who are more likely to already have high earnings. An open question for policymakers is whether such programmes should be eligible to receive federal aid if they do not produce earnings *gains* for their students, even if they do not lead to difficulty in loan repayment. While the for-profit industry criticised the GE regulations for not adopting measures based on 'value-added', the results of Cellini and Turner (2016) suggest such regulations might result in far greater industry contraction than the current rule.

An open area for research is whether the GE regulations will improve student outcomes in higher education more broadly, especially in economic downturns. A weakness of the regulations is that they are based on backwards-looking quality measures based on the outcomes of students who enrolled in a programme three to six years earlier (depending on the programme's length). During the Great Recession, the quality of programmes at many for-profits appears to have degraded very quickly and the GE accountability measures would have sanctioned them only with a substantial lag. While GE might prevent poor programmes from operating indefinitely, other policies might be necessary to discourage students from enrolling in low-quality programmes to begin with. For example, countercyclical grants to community colleges to expand capacity, triggered by increases in area unemployment, might prevent workers fleeing deteriorating labour markets from enrolling in for-profit colleges. Or, 'risk-sharing' policies that require colleges to bear some fraction of the cost of their defaulted-upon student loans might nudge institutions to be more attentive to their students' success. More research is needed to better understand the relative merits of these various policy levers.

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## About the author

**Jordan Matsudaira** is an education and labour economist interested in identifying the most cost-effective interventions to improve social mobility. Jordan holds a Ph.D. in Economics and Public Policy from the University of Michigan, and was a Robert Wood Johnson Post-Doctoral Fellow in Health Policy Research at University of California, Berkeley before coming to Cornell. From 2013 to 2015 he was on leave from Cornell on President Obama's Council of Economic Advisers, serving as Chief Economist. In the Administration, he worked on a variety of labour and education policies, including the Gainful Employment regulations of for-profit colleges; an expansion of the Federal overtime protections in the Fair Labour Standards Act; and the technical development of the College Scorecard.

# 6 The economic impact of US immigration policies in the Age of Trump

**Anna Maria Mayda and Giovanni Peri**
Georgetown University and CEPR; University of California, Davis

## Introduction

During his first hundred days in office, President Trump signed several immigration-related executive orders (EOs). These could imply substantive changes to US immigration policies. The stance of these executive actions is in line with the aggressively anti-immigrant positions expressed during the electoral campaign. Two EOs have restricted travel from some Muslim-majority countries – but they have been challenged in the judicial court system and eventually blocked. One has revamped the system for deportation of illegal immigrants and another has pushed forward with plans to extend the wall along the US-Mexico border. Still another EO promotes the 'Buy American and Hire American' principle and promises to overhaul the H-1B visa programme, making it harder for US companies to hire foreign temporary workers.

Without real legislative action, which would take significant time and effort due to the need for Congressional approval, the power of these executive measures is limited. However, they all point in the direction of implementing a much more restrictive immigration policy relative to previous – both Democrat and Republican – administrations. This essay documents the critical aspects of these policy changes, in order to assess their likely economic impact. Given that these policy changes may have large adverse effects, we will conclude by discussing the political-economy drivers of these policy changes and make educated guesses as to how the current administration might move forward.

## Content of executive orders

The two 'travel related' EOs ban travellers and immigrants from six Muslim-majority countries (Syria, Iran, Yemen, Sudan, Somalia, Libya, as well as Iraq in the first executive order) for a temporary period (90 days).[1] However, while the first EO targeted anyone from these countries who is foreign-born, independently from their visa status, the second EO excluded from the ban the following groups: those holding green cards, those with already-issued visas, and refugees who have already been granted refugee status by the time of the EO. Both EOs also block refugees from any country for 120 days; the first included a ban on Syrian refugees for an indefinite period, though it did permit exceptions for refugees from religious minorities. Finally, the EOs set the quota for refugees per year to 50,000, reducing the quota of 110,000 planned by the Obama administration for FY 2017. These EOs were suspended as of April 2017.

In EO 13768 (White House, January 25, 2017), the Trump administration also directed US Immigration and Custom Enforcement (ICE) to accelerate the illegal immigrant deportation process by prioritising aliens involved with *any* criminal activity, and not just those facing serious charges, a change from the Obama administration. Trump's proposed budget has also included funding increases for border agents to allow ICE to process deportation at a higher rate and intensity.

Trump's executive actions on deportation of illegal immigrants have met with some political resistance and opposition. A number of 'sanctuary cities' have emerged that attempt to shield undocumented migrants, although the Trump administration has responded with threats of cutting off federal aid. This issue is currently in the courts and, as of April 2017, a Federal judge had ruled Trump's executive actions on sanctuary cities unconstitutional.

The Trump administration also issued EO 13767 (White House, January 25, 2017) with plans to build a wall, which would cover 1000 miles of the 1,900 miles of the US-Mexico border.[2] The White House estimates for costs of construction range from $10-12 billion, though independent analysts suggest it could be perhaps as much as $25 billion.[3]

1 The two 'travel-related' EOs are EO 13769 (White House, January 27, 2017) and EO 13780 (White House, March 6, 2017).

2 There are currently 650 miles of fencing along the border.

3 Lee, Michelle Ye Hee and Glenn Kessler "Fact-checking President Trump's Pinocchio-laden Associated Press interview," *The Washington Post*, 25 April 2017.

Finally, EO 13789 (White House, April 18, 2017) includes provisions to review and tighten the H-1B visa programme with the goal of increasing the number of hurdles that companies would have to clear to hire a foreign-born worker.

## Predicted economic effects

These policies have economic consequences, both for the changes they imply and for the fact that they signal the intention of making it even harder, in the future, for US companies, universities, laboratories and research centres to hire foreigners. While the administration has communicated that it intends to reform the immigration system toward one that is 'merit based', its actions and announcements suggest that the overall number of foreign workers – temporary visas and possibly permanent immigration permits – will be reduced.

The executive orders banning travel from the Muslim majority countries have affected mainly students, scholars, and highly educated professionals. The majority of temporary visa holders from those countries work as professionals and many are in professions involving Science, Technology, Engineering and Math (STEM). The ban has created costly delays, complicated legal issues and uncertainty for anyone seeking to hire those immigrants. It has also discouraged highly educated potential immigrants from those and other Muslim countries from choosing the United States as a destination, to the detriment of the US academic and scientific community.

Research reveals considerable evidence that foreign scientists and engineers contribute substantially to US innovation (Kerr and Lincoln 2010), that foreign college-educated workers are more likely to innovate (Hunt, 2010) and that productivity at the local level benefits significantly from their presence (Peri *et al*. 2015). Additional evidence shows that foreign high-skilled STEM workers complement native-born workers, especially young ones, in US companies (Kerr *et al*. 2015), and that they make considerable contributions to US productivity growth (Bound *et al*. 2017).

Overall, these studies suggest that a reduction in high-skilled immigrants is likely to *reduce* – rather than to increase – opportunities, productivity and wages of the native-born American workforce, especially for the college educated.

The executive order intensifying the efforts for deportation of undocumented immigrants not only threatens the day-to-day life of several million people, it also undermines the economic viability of entire sectors of the US economy. An estimated eight million undocumented aliens currently work in manual jobs in the agriculture, construction, hospitality, food and personal-services industries. Many take on the low paid, physically demanding jobs that American-born workers – who are typically better educated, but also aging – do not want any longer.

Nevertheless, undocumented workers also provide important services to sectors that employ large numbers of Americans workers in different type of jobs, for example as supervisors, managers, accountants, salespersons, and IT specialists. Less-educated workers tend to complement and extend the work of middle to highly educated Americans (Peri 2012, Ottaviano and Peri 2012). Without the undocumented migrant workers, a number of sectors of the US economy are expected to slow their growth and terminate the jobs currently held by American-born workers as well. Another consequence of the higher US costs could be that American companies have further need to offshore more jobs and import more foreign-produced goods in order to remain competitive (Ottaviano *et al*. 2015).

US domestic production of several agricultural products could dramatically shrink or even disappear, their imports will increase and their prices become higher. The prices of services in the hospitality, food and personal-services industries may also increase (Cortes 2008), and those sectors will slow their growth. Certain urban economies, such as Los Angeles, Las Vegas and Phoenix, attribute much of their growth to reliance on jobs of less-skilled immigrant workers; these cities may experience bottlenecks and shortages that could result in sectoral decline that would multiply through the local economy (see Moretti 2014).

There is the potential that a few of the manual, low-skilled jobs will be taken-up by Americans, leading to marginal improvements in wages for some local workers.

However, the negative impact on job creation of complementary jobs could be more significant (see Ottaviano and Peri 2012, Peri and Sparber 2009, Chassamboulli and Peri 2015) as US workers benefit much more from growth in the intermediate-skill jobs than from manual-intensive, low-skilled employment opportunities.

It is also important to emphasise that the very expensive project of building a wall with Mexico will have economic consequence, in that it will divert government resources that could be used more profitably elsewhere. The core rationale for such a wall is questionable, as immigration from Mexico has been declining steadily for more than a decade, and the number of undocumented workers has not changed since 2006 (Krogstad *et al*. 2017). Immigration in the last decade has grown largely because of the sizeable inflow of highly educated young Asians – mainly from India and China – rather than of less-educated Mexicans. In ignoring this fact, public resources will be used to target a problem that no longer exists. Mexico has undergone an economic and demographic transition, so that the number of its low-educated young people (who are those more likely to emigrate) is now much smaller than in the 1990s. The border fence already prevents most of the attempted border crossings and existing projections of economists (e.g. Hanson and McIntosh 2016) show a steady decline in the inflow from that country.

Finally, the main long-run cost of these executive orders could be that they create a climate of perceived hostility to new immigration and decreased openness to foreign workers, including the highly educated ones, and especially those from certain countries. This could divert the highly and internationally mobile scientists, engineers and professionals towards countries such as Canada, Australia and China, eroding the US excellence in their areas, which is a pillar of US economic leadership. While the impact of the executive orders is, as yet, small enough not to be of long-run concern, a significant decrease in highly skilled immigrants could have more sizeable and permanent effects on growth.

## Political economy drivers and implications

It is not surprising that candidate Donald Trump embraced demands for populist measures on immigration, during the Presidential campaign. Public opinion is opposed to immigration in most destination countries, including the United States (Scheve and Slaughter 2001, Mayda 2006). In addition, while the dominant narrative in US political circles is that immigration is a 'problem' for Republicans, the opposite turns out to be the case in some counties and states, including those that may be crucial for electoral outcomes. What Trump has understood and exploited is that there is a political pay-off for Republicans in these localities if they 'act tough' on immigration during electoral campaigns.

Systematic evidence from a recent analysis of immigration and electoral outcomes between 1990 and 2010 finds that, in US counties where less skilled workers are a majority, the economy is not urban and local public spending is large, US voters responded to large recent waves of immigration by rewarding the Republican party and its anti-immigrant platform (Mayda *et al*. 2017). This can be explained in an economic perspective: while immigrants produce aggregate benefits for the economy and employment/wage gains for most Americans, these are mostly for workers that complement immigrants, i.e., the typical example is a highly skilled worker in an urban area. The perception of less skilled non-urban workers, often relying on public assistance programmes, is that they are penalised by immigration. This drives some voters' demands for populist measures on migration, which Trump has used to his political advantage.

Overall, it is very concerning that the current administration has moved forward, in practice, with these significant changes in immigration policy. It is hard to believe that a businessperson who has employed immigrants himself does not understand the likely economic costs of these policy proposals, especially those affecting skilled migration. One hope is that the administration ultimately chooses to leave behind these clumsy populist attempts at changing US immigration policy. The US economy needs immigration policy reform, but not of this sort. What is really needed is improved efficiency, flexibility and allowing more freedom to individuals and markets, including the labour market – not the imposition of more restrictions and constraints.

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## About the authors

**Anna Maria Mayda** is an Associate Professor of Economics at Georgetown University (School of Foreign Service and the Department of Economics). Anna Maria's research mainly focuses on the political economy of immigration and trade policy and has been published in leading economic journals, such as the *Quarterly Journal of Economics*, the *Review of Economics and Statistics*, the *Journal of International Economics* and the *European Economic Review*. Her work has been funded by grants from the National Science Foundation, the World Bank, the International Monetary Fund, the Inter-American Development Bank and the OECD. Anna Maria was born in Italy and studied Economics and Statistics at University of Rome La Sapienza as an undergraduate. She received her MA and PhD in Economics from Harvard University in 2003. She is a Research Affiliate at CEPR, a Research Fellow at IZA, and an External Fellow at the Center for Research and Analysis of Migration (CReAM).

**Giovanni Peri** is Professor and Chair of the Department of Economics at the University of California, Davis and Research Associate of the National Bureau of Economic Research in Cambridge, Massachusetts. He is Editor of *Regional Science and Urban Economics* and on the editorial Board of several Academic Journals in Economics. He is the Director of the UC Davis Migration Research Cluster. His research has focused on the impact of international migrations on labour markets and productivity of the receiving countries and on the determinants of international migrations. He has published in several academic journals including *American Economic Review*, the *Review of Economic Studies* and the *Review of Economics and Statistics*.

# 7 The hidden American tax on imported cars: Fuel economy standards instead of tariffs

**Arik Levinson**
Georgetown University

As a presidential candidate, Donald Trump proposed a tariff on imported cars.[1] A year later, President Trump has announced plans to re-evaluate fuel economy standards set by the previous administration, presumably to loosen their stringency.[2] Though seemingly unrelated, those two policy proposals are contradictory. The fuel economy standards themselves have a built-in bias equivalent to a tariff on imports ranging from $80 to $200 per car. Loosening the standards would lower those implicit tariffs.

To see why, it is necessary to first understand how the US Corporate Average Fuel Economy (CAFE) regulations work. Since 1978, the Department of Transportation (DOT) has set average miles-per-gallon (mpg) targets for all new vehicles sold in the United States. For most of the 1990s and 2000s, that target was 27.5 mpg. Carmakers could sell lower-performing cars, but their sales would have to be matched by sales of cars achieving higher fuel economy.

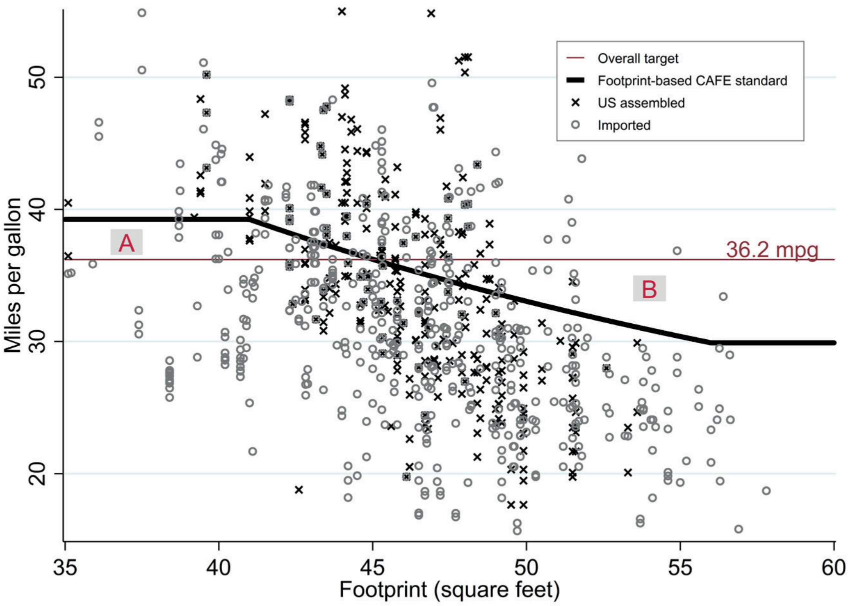
In 2007, Congress directed the DOT to tighten the mpg targets and allow carmakers that fail to meet the tighter targets to buy credits from carmakers that exceed them. And, key to this story, the law required DOT to set the new standards 'based on 1 or more vehicle attributes related to fuel economy and express each standard in the form of a mathematical function.'

1 "Trump proposes 35 percent tax on foreign-produced cars", The Hill September 15, 2016.

2 "Trump Starts Review of Obama-Era Fuel-Economy Rules, Putting Electric Cars in Doubt", Fox Business March 15, 2017.

To comply with that 2007 legislation, starting with model-year 2011, the DOT has been setting targets that differ based on vehicles' 'footprints'– cars' sizes as measured by the area under their four tyres. The mathematical function that DOT chose is complex, but its effect can be seen in Figure 1, drawn for model-year 2015 cars.[3] The left axis reports fuel economy, and the horizontal line at 36.2 mpg represents the overall average fuel economy DOT expects the regulation to achieve. But the actual target carmakers face depends on the footprints of the cars they sell, listed on the bottom axis. The target follows the thick segmented line. New small cars sold in 2015, with footprints smaller than 41 square feet, were required to get 39.24 mpg. But large cars, over 56 square feet, needed to get only 29.9 mpg.

**Figure 1.** Car models by fuel economy and footprint; model year 2015.




*Source:* EPA Trends and Auto-News.com. US-assembled refers to cars produced domestically, according to Auto-News.com.

3 The actual formula is: $\text{Target mpg} = 1 \div \left(min\left[max\left(c \times Footprint + d, \frac{1}{a}\right), \frac{1}{b}\right]\right)$ where, for model-year 2015 cars, $a$=39.24, $b$=29.90, $c$=0.0005308, and $d$=0.003719. The standard gets more stringent each year by raising $a$ and $b$, and lowering $d$.

That 2011 change from a flat overall target to a footprint-based standard has resulted in an implicit tariff on imported cars. To show that, Figure 1 plots each make and model car as a point on the graph. Crosses denote domestically assembled cars; circles denote imports. The cars most clearly disadvantaged by the change lie in region 'A' of the graph. Those models would have met an overall mpg target, but fail to meet the footprint-based target. Under a flat target those models could have sold credits to underperforming models. Under the footprint-based target they must buy credits. Most of those newly disadvantaged cars are imports, represented by circles.

Car models most clearly advantaged by the footprint-based CAFE standards are in region 'B'. Those would have failed an overall target and needed to buy credits, but they exceeded the footprint-based standard and could instead sell credits. More of those are US-made.

The change affects all cars, not just those in regions A and B. Each car model's compliance depends on how far above or below the target line it falls. Thanks to the footprint-based formula, US-made cars are closer to meeting their mpg targets, while imports are farther from meeting them. The formula *adds* 0.70 mpg to the average US-assembled car in 2015, relative to the flat fleetwide average at 36.2 mpg. It *subtracts* 0.75 mpg from the average imported car.

How much is this worth? The fine DOT levies on carmakers currently stands at $55 per mpg per vehicle. If we take that as the compliance cost (or, alternatively, as the price of a one-mpg credit), the footprint formula adds $39 worth of extra mpg credits to the average US-made car and subtracts $41 worth of credits from the average import, for a total difference of $80 per car. That's an $80-per-car advantage to American cars provided by the footprint-based CAFE standards.[4]

That US advantage was scheduled to increase steeply in coming years, but the Trump Administration looks ready to reverse that. In July of 2016, before the election, the DOT announced it was raising the fines from $55 to $140 per mpg, mostly as an overdue adjustment for price inflation.

4 In Levinson (2017) I show that this footprint-based advantage applies to all model years, and for alternative definitions of imported cars.

But in December the Agency delayed that increase until the 2019 model year. An increase in the penalties to $140 would increase the footprint-based US advantage to over $200 per car.

Similarly, the Trump Administration's recent steps to delay implementation of stricter standards for model years 2022 to 2025 affects all carmakers. But under the footprint-based formula, US carmakers have less far to go to meet those standards. Taking the 2015 fleet pictured in Figure 1 as a baseline, tighter standards would mean US carmakers have fewer credits to sell, but makers of imported cars would have more to buy.

Though small, the advantage afforded to domestic carmakers by the footprint-based CAFE standards amounts to a form of 'environmental protectionism'. In theory, that's prohibited by international trade agreements like NAFTA and the World Trade Organization. Those agreements have environmental provisions that explicitly forbid countries from weakening environmental rules to favour domestic producers, or designing rules that target foreign producers.

For example, the NAFTA agreement outlaws any environmental regulation that constitutes a 'disguised restriction on trade'. That 'disguised restriction' language parallels text from the earlier General Agreement on Trade and Tariffs, and it appears again in the proposed Trans Pacific Partnership recently abandoned by the US.[5]

Of course, none of this language clearly delineates what constitutes environmental protectionism. Well-disguised trade restrictions might well evade scrutiny. Ederington and Minier (2003) document that US industries with more import competition face less strict environmental regulations. Miravate *et al.* (2016) and Klier and Linn (2016) show that European automobile emissions regulations favour diesel engines, which are primarily manufactured in EU countries, while American regulations favour gasoline engines. If those cases represent trade restrictions, their disguises appear to be working.

The 2011 switch to footprint-based CAFE standards in the US was rationalised (or 'disguised') as improving vehicle safety. Prior to 2011, the uniform standard (the flat 36.2 mpg line in Figure 1) incentivised car companies to sell smaller cars (Kwoka 1983).

5 Articles 1113 and 1703 of the NAFTA, Article XX of the GATT, and Article 20.2 of the TPP.

And a National Academy of Sciences report (2002) found that in collisions, passengers in smaller cars sustain worse injuries.

But that safety justification for the switch has come under scrutiny. In collisions between unequal-sized cars, it's not clear whether more passengers would be saved if the smaller car were larger or the larger car smaller. Furthermore, the National Academy study did not account for the fact that more safety-conscious drivers might select larger cars, making the larger cars appear safer. Most recently, Jacobsen (2013) compared a variety of potential CAFE standards, including the flat standard and the footprint-based one, accounting for all fatalities including pedestrians and bicyclists, and controlling for selection by cautious drivers of larger cars. He finds that the footprint-based standard provides almost no safety benefits, but comes at large cost. The least expensive way to reduce fuel use is to drive smaller cars, and the footprint-based standard eliminates that path to compliance.

In 2017, on the eve of President Trump's inauguration, the US federal agencies finalised their review of the CAFE standards scheduled for model years 2022 through 2025.[6] In preserving the footprint-based standard, the review cites an analysis by Puckett and Kindelberger (2016) that estimates fatality risk as a function of vehicle weight and size. The two are correlated, making inference difficult, and, in general, reducing mass or footprint alone without changing the other, results in no more casualties. But a uniform CAFE standard, as existed before 2011, incentivised reductions in both simultaneously. In general, the safety justification for the switch to footprint-based CAFE standards continues to rely on disputed evidence.

That decision to leave in place the scheduled tightening of the CAFE standards is now being challenged by the Trump Administration. Ironically, while those upcoming strict targets –54.5 mpg by 2023 – will be difficult for all carmakers to meet, their footprint-based formula means they confer an extra advantage on US carmakers.

6 US EPA (2017).

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## About the author

**Arik Levinson** is a Professor in the Economics Department of Georgetown University, where he teaches microeconomics, public finance and environmental economics. He is a Research Associate at the NBER and a Co-Editor of the Journal of the Association of Environmental and Resource Economists and holds a PhD from Columbia University.

# Part II

## Domestic Policy Reform II: Tax, central banking, financial regulation, and the macroeconomy

# 8 Tax reform in the Age of Trump

**Nirupama Rao**
New York University

More than 30 years have passed since the last major overhaul of the US tax code. In the years since, marginal rates have risen while numerous carve-outs, deductions and credits and been added and expanded. The result is a tax system with marginal tax rates as high as 39.6% on individuals and 35% on corporations, that raised $3.25 trillion dollars in revenues in 2015 but spent $1.34 trillion on tax expenditures.

The high rates and substantial tax expenditures that characterise the US tax system render it ripe for reform. Following the June 2016 release of the House Republicans' *A Better Way for Tax Reform*, then Presidential candidate Donald J. Trump outlined his own plan for revamping federal taxes.[1] The goal here is to outline the major policy changes embodied by these two plans, describe their likely economic impacts, and then assess the procedural challenges these reform options face.

At this stage, very few of the necessary details of these reform options have yet to be articulated. There is much time and scope for these proposals to evolve and strong indications that they might. Indeed, President Trump's rhetoric regarding tax reform has changed over time and sometimes contradicts his own campaign proposals.[2] As such, the discussion here centres on the House Republicans (GOP) and Trump campaign proposals as of April 2017.

1 Here we assess the Trump campaign's September 2016 revised tax plan. Candidate Trump first unveiled a tax plain in 2015 and the again in August 2016. The final September 2016 version hews much closer to the House GOP plan but does not include a border adjustable tax.

2 For example, during his February 28, 2017 speech to Congress President Trump pledged that "We will provide massive tax relief for the middle class", despite the fact that the bulk of tax cuts in his September 2016 tax plan accrue to the top 1% of households.

Given the minority status of Congressional Democrats and the GOP plan to pursue tax reform through the reconciliation process, obviating the need for Democratic support, the assessment focuses on the reform options put forth by Congressional Republicans and the Trump Administration. Whether any final legislation is a blend of these two plans or incorporates tax cuts aimed at middle income Americans remains to be seen.

## The plans

The House GOP plan put forth by Speaker Paul Ryan and Ways and Means Committee Chairman Kevin Brady is a more sweeping fundamental reform of federal taxes than the White House plan as described during the Presidential campaign. While both plans reduce tax rates on ordinary income like wages and interest, and pass-through income like that from partnerships, the House GOP plan alters corporate taxation more substantially, and would lead to fundamental changes in the federal tax base.

Table 1 below draws on work by the Urban-Brookings Tax Policy Center to compare the key characteristics of the House GOP and Trump plans to the current federal tax system.

### Changes to individual taxes

The Trump and House GOP plans propose similar reforms to federal taxes on individual income. They both consolidate the seven current individual income tax brackets that range from 10% to 39.6% to just three tax brackets with rates of 12%, 25% and 33% – reducing the top marginal tax rate by 20%. They both eliminate personal exemptions and instead allow for more generous standard deductions, raising the current $6,300 standard deduction for single filers ($12,600 for joint filers) to $15,000 under the Trump plan ($30,000 for joint filers) and $12,000 under the House GOP plan ($24,000 for joint filers).

**Table 1** Key tax policy parameters under current law and the Trump and House GOP proposals

| | Current Law | Trump | House GOP |
|---|---|---|---|
| Individual | | | |
| Tax rates | 10%, 15%, 25%, 28%, 33%, 35%, 39.6% | 12%, 25%, 33% | 12%, 25%, 33% |
| Standard deduction | $6,300 if single<br>$12,700 if joint | $15,000 if single<br>$30,000 if joint | $12,000 if single<br>$24,000 if joint |
| Mortgage int. deduction | Reduced if AGI exceeds $259,400 for single $313,800 for joint | Retain | Retain with unspecified reforms |
| Charitable deduction | | Retain | Retain with unspecified reforms |
| Other itemised deductions | | Cap at $100,000 for single $200,000 for joint | Repeal |
| Top capital gains rate | 23.8% | 20% | 16.5% |
| Top dividends rate | 23.8%* | 20% | 16.5% |
| Top interest tax rate | 43.4% | 33% | 16.5% |
| Individual AMT | Yes | Repeal | Repeal |
| Business | | | |
| Top pass-through rate | 39.6% | 15% | 25% |
| Top corporate rate | 35% | 15% | 20% |
| Interest deduction | Yes | Yes, but capped | Repeal |
| Investment deductions | Depreciation | Expensing | Expensing |
| International tax system | Worldwide w/ deferral | Worldwide, no deferral | Territorial |
| Corporate AMT | Yes | Repeal | Repeal |

The House GOP plan also eliminates all itemised deductions other than deductions for home mortgage interest and charitable contributions – with some unspecified reforms to each -, while the Trump plan retains all itemised deductions but caps total allowed itemised deductions at $100,000 for single filers and $200,000 for joint filers.

Estimates from the Urban-Brookings Tax Policy Center suggest that increasing the standard deduction – and in the case of the House GOP plan eliminating many itemised deductions – would result in 84% of those who would otherwise itemise in 2017 taking the standard deduction instead. Overall elimination of personal exemptions in favour of a larger standard deduction will reduce the tax bills of childless workers, while single parents and married parents with more than two children will face higher tax bills.

While the Trump plan retains today's special tax rate on capital gains and dividends, the House GOP plan replaces the special rate with a 50% deduction. Further, interest income is also granted the 50% deduction. Thus, today's top rate on capital gains and dividends, 23.8% which includes the 3.8% surtax on net investment income levied as part of the 2010 Affordable Care Act (ACA), would be reduced to 16.5% under the House GOP plan and limited to 20% under the Trump plan, which would excise the surtax along with other ACA taxes. Cutting dividend taxes has been found to boost dividend payouts (Chetty and Saez 2005), but has not been found to boost investment spending (Yagan 2015). Changes in capital gains taxes are thought to have larger transitory than permanent impacts on realisations (Burmen and Randolph 1994, Auerbach 1988). For interest income the House GOP plan would reduce the top rate from 43.4% to 16.5% while the Trump plan would continue to tax interest as ordinary income albeit at lower marginal tax rates. Finally, both plans repeal the individual AMT.

## Changes to business taxes

Recipients of income from pass-through businesses, such as sole proprietorships, partnerships and S-corporations, will see large tax reductions under both the Trump and House GOP plans. Pass-through income is not subject to corporate taxes and is currently taxed at the recipient's ordinary income tax rate, which today can be as high as 39.6%. Under the Trump plan individuals can elect for a 15% tax rate on pass-through income (though income from 'large' pass-through entities will be taxed as dividends). The House GOP plan reduces the tax rate on pass-through income to 25%. Both of these tax reductions will favour higher income tax payers.

Although the term 'pass-through' often invokes the idea of small businesses, and indeed sole proprietors comprise about two-thirds of the 38 million households who report pass-through income on their individual tax returns, most pass-through income is received by high-income households. Estimates show that altogether households with less than $100,000 in income account for roughly 15% of pass-through income, while households with at least $200,000 in income receive 80% of pass-through income, with those with at least $500,000 in income accounting for 60%. Higher income households account for the majority of pass-through income and, thus, tax breaks under the Trump and GOP tax plans.[3]

Beyond distributional impacts, both plans create substantial gaps between the top tax rate on ordinary wage income and pass-through income: 18 percentage points in the Trump plan and eight percentage points in the House GOP plan. These gaps create strong incentives for workers to receive their compensation in the form of income paid to a pass-through business rather than as wage income that faces steeper tax rates as the state of Kansas recently discovered. In 2012 Kansas eliminated taxes on pass-through income and, as a result, the number of taxpayers claiming the pass-through exemption doubled to 400,000 taxpayers.

The two plans propose some similar corporate tax reforms, namely they reduce corporate tax rates, allow for the immediate expensing of all capital purchases and repeal the corporate alternative minimum tax (AMT). Allowing all firms to expense capital purchases expands the tax benefits currently enjoyed by small businesses under Section 179 of the US tax code and effectively exempts the normal rate of return on investment from corporate taxation, and treats all assets and industries with different asset intensities identically, reducing distortions. The resulting lower cost of investment should attract capital from domestic and foreign savers, promoting investment (Hall and Jorgenson, 1967). Recent empirical work suggests that accelerated depreciation has a substantial effect on investment, though the effects are largest for small firms and concentrated among taxable firms (Zwick and Mahon 2017). A larger capital stock should improve labour productivity and lead to higher wages.

3 For details please see http://www.taxpolicycenter.org/model-estimates/distribution-business-income-august-2016/t16-0180-distribution-business-income.

The stark reductions in the top corporate tax rates of both plans, more than halving the top statutory rate from 35% to 15% in the case of the Trump plan, will further bolster incentives for corporate activity.[4] Unlike capital expensing these rate cuts will reduce the tax burden on normal and super-normal profits arising from patents and other sources of rents alike.

Exempting the normal rate of return from taxation and reducing taxes on super-normal profits do, of course, have distributional drawbacks. The concentration of investment income among high-income taxpayers means that these tax benefits will accrue largely to the well-off. Although stronger economic growth and the potential for higher wages from higher labour productivity may partially offset these distributional impacts, overall the expensing of corporate investment and steep cuts in corporate tax rates will be regressive.

Beyond these rate cuts and capital expensing, the House GOP plan includes a border-adjusted cash flow tax (BACFT) that is not part of the 2016 Trump plan. The current US corporate tax is levied on the difference between corporate revenues and tax-deductible expenses, which include wages, salaries and fringe benefits paid to workers, rental payments, capital depreciation allowances and interest payments. The BACFT makes two major changes to the corporate tax base not shared with the Trump plan. First, the BACFT disallows interest deductions. Second, it only counts domestic transactions, meaning that exports will be tax-exempt and imports no longer tax deductible.[5] One way to understand the BACFT is as a subtraction-method value added tax (VAT) that allows for the deduction of employee compensation. The US would move from taxing the worldwide income of US firms to only taxing income arising from domestic sales and moving the US toward a consumption tax base.

4 It is worth noting that the current US statutory corporate rate of 35% belies substantial heterogeneity and much lower effective tax rates. A 2016 study by the US Treasury Department found that between 2007 and 2011 the average tax rate of profitable corporations with over $10 million in assets was 22% (US Treasury, 2016). Numerous deductions, including existing accelerated depreciation and expensing of research costs, tax credits for research, domestic production activities, deferral of taxes on foreign earnings held abroad along with a host of more targeted tax expenditures generate these lower effective tax rates.

5 This section draws on analysis by Eric Toder available at http://www.taxpolicycenter.org/publications/what-difference-between-current-corporate-income-tax-and-destination-based-cash-flow/full.

These policy differences bring advantages over the current tax system as well as the Trump plan.

First, the repeal of interest deductibility places debt and equity financing on an even footing. Thus, asset productivity and risk management will play larger roles in investment and financing decisions relative to tax avoidance.

Second, by exempting income earned abroad from taxes, the BACFT eliminates tax incentives to offshore economic activity and park foreign profits overseas. The current tax system taxes foreign profits, but only upon repatriation to the US, creating strong incentives for multinational firms to operate and leave profits in lower-tax countries. These tax gains can even motivate firms to invert, that is expatriate by merging with foreign entities. These inversions tend to be followed by the offshoring of jobs and investment, meaning that these address changes can have real economy consequences (Rao 2015). By no longer taxing foreign earnings, the BACFT jettisons these incentives.

Perhaps most importantly, because US imports are currently larger than US exports, the BACFT raises substantial revenue. Estimates suggest that the BACFT would raise roughly $100 billion annually if the US trade deficit remains unchanged (Nunns *et al*. 2016).[6] These revenues offset revenue lost by the House GOP plan's steep reductions in tax rates on investment income. By reducing taxes on individual income and swapping the corporate income tax base for a more consumption-like tax base the House GOP plan, in a sense, moves the whole tax system closer to a general sales tax.

It important to note that, despite exempting exports and taxing imports, the BACFT will not act as a protectionist tariff. As described in detail in the contribution to this volume by Amiti *et al.* (2017), the BACFT will lead the US dollar to appreciate, offsetting the tax on imports and rebate on exports and leaving the trade balance unchanged.

6 Some regard this revenue as short-term rather than long-term because of any near-term trade deficits must eventually be offset by trade surpluses; whether the federal government would remit refundable tax credits to US corporations operating under trade surpluses under the DBCFT remains to be seen. Others have questioned the revenue total because of concerns that the deficit includes current corporate profit shifting that would no longer take place under the DBCFT (Setser 2017).

Appreciation of the dollar, however, will lead to important distributional consequences.[7] Holders of US assets will benefit from the stronger dollar while domestic holders of foreign assets will see the purchasing power of their investment decline. Foreign asset holders as well as highly levered firms may seek transition rules or compensatory payments that will require new revenues. Any tax increases necessary to fund these transition rules will undermine the efficiency gains of the House GOP plan.

## Fiscal and economic impacts of reform

Estimates from the Urban-Brookings Tax Policy Center suggest that both reform plans will increase the federal deficit and reduce the progressivity of the US tax code. According to static scores, federal revenues will decline by $6.2 trillion under the Trump plan and $3.1 trillion under the House GOP plan over the first 10 years after they go into effect.

Dynamic scores that incorporate macroeconomic feedback effects show that the tax cuts would boost GDP and reduce the costs of the plans in the near-term, but eventually upward pressure on interest rates will crowd out private investment and reduce GDP. Including interest costs, by 2036 the federal debt will be $22.1 trillion and $9.2 trillion higher under the Trump and House GPOP plans, respectively.

Both plans will cut taxes for all taxpayers, but high income taxpayers will receive the lion's share of gains. For the top 0.1% of households whose annual incomes top $3.7 million, the Trump plan will boost after-tax income by 15% or $1.1 million, similarly to the House GOP plan tax cut of 16.9% of $1.3 million. Taxpayers in the middle quintile will see their after-tax income rise by 1.8% or $1,010 under the Trump plan and 0.5% or $260 under the House GOP plan. At the bottom of the income distribution after-tax incomes will change little under either plan. For the bottom quintile after-tax income will rise by 0.8% or $110 under the Trump plan and roughly 0.4% or $50 under the House GOP plan.

7 See also the collection of research in Bown, Freund and Posen (2017).

## The procedural hurdles

Regardless of the costs and benefits of the Trump and House GOP tax reform proposals, significant procedural hurdles put the implementation of either proposal, or a compromise reform plan into question.

Challenges to passing legislation stem from the failure of Congressional Republicans to repeal and replace the ACA by passing the American Health Care Act of 2017 (AHCA) and their choice to pursue tax reform through the reconciliation process. A key component of the AHCA was the repeal of taxes levied by the ACA. The revenue lost from repealing these taxes – which include a 3.8% surtax on net investment and additional 0.9% tax on wages for high income households, a 2.3% medical device tax, and a tax on tanning salons among others – was offset in the AHCA by curtailment of health insurance subsidies for low income households and cuts in Medicaid spending. Without these tax reductions handled in the AHCA, they will need to be repealed as part of tax reform, necessitating offsetting revenue to be raised through the tax code rather than through cuts in health spending. Disagreements about how to raise these revenues may preclude reform.

These offsets are in part forced by the rules of reconciliation. The benefit of the reconciliation route is that reconciliation bills are not subject to filibuster in the Senate, meaning that a reform bill could be passed with a party-line vote. Reconciliation bills, however, cannot increase the federal deficit outside of the 10-year budget window, with the implication that the bill must be revenue neutral in the long-run, or be scheduled to sunset. Neither of these options may be compelling enough to draw the votes of the majority.

Finally, even if legislation is passed, the BACFT may be inconsistent with US commitments in various trade agreements including the World Trade Organization (WTO). Although subtraction-method VATs are popular taxes used in many nations and are generally in accord with international tax agreements, the deductibility of employee compensation under the BACFT may render the tax incompatible with international trade agreements.

## The prognosis

Tax reform is nearly always an uphill battle. Changes in the tax code that lower marginal tax rates by reducing exclusions create narrow sets of losers who lose salient tax breaks and a diffuse group of winners who gain from the less obvious benefits of faster economic growth. Arguably it is harder yet in the time of Trump, when Congressional GOP leaders have chosen a partisan path to pass a bill with distributional effects that are starkly at odds with the campaign rhetoric of the newly elected Republican President.

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## About the author

**Nirupama Rao** is an Assistant Professor of Economics and Public Policy at NYU's Wagner School of Public Service. Her research concerns the economic effects of fiscal policy, focusing on the impact of policy on firm production, investment and pricing decisions and individual consumption decisions. She is a recipient of the National Tax Association Dissertation Award. Rao completed her PhD in economics at MIT in June 2010 where she previously earned her undergraduate degree. Prior to graduate school, she worked at the Andrew W. Mellon Foundation. She recently served as a Senior Economist from 2015 through 2016 at the Council of Economic Advisers in Washington, D.C.

# 9 The border adjustment tax

**Mary Amiti, Emmanuel Farhi, Gita Gopinath, and Oleg Itskhoki**
Federal Reserve Bank of New York and CEPR; Harvard and CEPR; Harvard; Princeton and CEPR[1]

**Proposed policy** A key feature of the Trump administration's economic policy is to slash corporate tax rates from their current 35% rate to 20%, or even as low as 15%. This rate reduction is proposed to be combined with a *border adjustment tax*, which would make export sales deductible from the corporate tax base, while expenditure on imported goods would not be deductible, in contrast with other costs such as wage bill and purchases of domestic intermediates.[2] Therefore, if the border adjustment extends to all imports and exports, it is akin to a combination of a uniform import tariff and an export subsidy on all international trade of the United States.

**Why border adjustment?** The border adjustment tax has both an economic and a political rationale. The economic argument in favour of a border adjustment is that it would limit the incentives for profit shifting across countries by means of *transfer pricing* towards lower tax jurisdictions.[3] The reason for this is that the border adjustment tax is a *destination-based tax*, linking the tax jurisdiction to the location of consumption, rather than the location of production. The political rationale is that the border adjusment tax is expected to help raise government revenues to cover the deficit that would emerge from the reduction in the corporate tax rate.

1 Prepared for www.voxeu.org The views expressed in this article are those of the authors and do not necessarily reflect the position of the Federal Reserve Bank of New York or the Federal Reserve System. Any errors or omissions are the responsibility of the authors.

2 The other features of the Ryan-Trump tax plan include streamlining the corporate tax system, allowing for immediate expensing of capital investment when it occurs and eliminating the current interest deduction. See Paul Ryan's policy proposal "A Better Way" (in particular, pp. 27-28 on border adjustment tax).

3 See Alan J. Auerbach and Douglas Holtz-Eakin "The Role of Border Adjustments in International Taxation". See also Auerbach *et al*. (2017).

**Border adjustment neutrality** Under certain circumstances, discussed below, the border adjustment tax has no effects on economic outcomes, in which case we call it *neutral*. A classical result in the field of international trade, called Lerner (1936) symmetry, is that a uniform tariff on all imports is equivalent to a uniform tax of the same magnitude on all exports.[4] As a corollary of Lerner symmetry, a combination of a uniform import tariff and an export subsidy of the same magnitude must be neutral, having no effect on imports, exports and other economic outcomes (see Grossman 1980). This policy shift results in an increase in the home relative wage and domestic cost of production by the amount of the tariff. As a result, the relative cost of domestic production increases proportionally with the cost of imports, as well as with the subsidy to exports, leaving no relative price affected, nor the real wage. The amount of trade, production and consumption also remains unchanged. As a result, tax policies that feature a border adjustment, such as the value added tax (VAT), do not have to systematically promote or demote trade (see Feldstein and Krugman 1990). The US policy proposal is to include the border adjustment tax together with a corporate income tax, which is a less common policy option, but the neutrality of border adjustment applies to it in equal measure.

**Conditions for neutrality** The discussion above suggests that a necessary condition for neutrality is that the relative wage rates across countries can flexibly respond to policy. To the extent that wages are sticky, the relative wage adjustment cannot happen via changes in nominal wages. However, this adjustment can be intermediated by a nominal *exchange rate appreciation* of the magnitude of the border adjustment tax.[5] Indeed, such an exchange rate appreciation ensures that border adjustment taxes do not affect the relative prices of traded and locally produced goods – the appreciation cancels out the stimulating effect of the tax deduction on exports, as well as the import levy effect of the border adjustment. Nevertheless, a number of additional conditions must be satisfied for the neutrality to hold (see Barbeiro *et al*. 2017):

4 A uniform tariff on imports reduces imports, but trade balance requires a parallel reduction in exports, which in equilibrium would result from the increase in the relative home wage and hence the relative cost of home production. The same effects of reducing exports and imports would emerge from an export tax, which however would be supported by a reduction in the relative home wage.

5 In economies with a fixed nominal exchange rate, such as members of a currency union, a border adjustment tax has the same effect as a nominal devaluation, and is often referred to as a *fiscal devaluation* (see Farhi, Gopinath, and Itskhoki 2014). This policy option was popular among the Euro Zone members in the aftermath of the financial crisis of 2008-09.

1. While wages can be sticky in arbitrary ways, the neutrality requires that either trade prices are flexible (i.e., immediately adjust to the tax), or that a certain symmetry assumption on the pass-through of the tax and exchange rate appreciation is satisfied. In particular, the neutrality must be supported by a reduction in the dollar prices of both US exports and imports in order to keep unchanged the terms of trade of the US with the rest of the world in the face of the dollar appreciation. While this is a natural outcome when prices are flexible,[6] the short-run price stickiness may result in the violation of this assumption, distorting trade prices and, in consequence, trade flows.

2. The border adjustment tax should extend uniformly to all imports and exports, otherwise it results in a differential trade distortion for certain goods and/or trading firms. When the border adjustment tax is uniform, then indeed the policy should *not* be viewed as a trade policy.

3. The US gross foreign assets and liabilities should be entirely in foreign currency terms, otherwise the exchange rate appreciation associated with the border adjustment tax will result in an international transfer between the US and the rest of the world by means of a capital gain or loss on the external asset positions. The dollar appreciation may have additional distributional consequences within the country, but the macroeconomic outcome of the border adjustment tax can still be neutral in this case.

4. The policy change must be unexpected, one-time and permanent. Otherwise, the dollar will appreciate, at least in part, in expectation before the policy is implemented, resulting in both distortions to international trade and to the portfolio choices of private agents. Similarly, neutrality would not hold if the policy is not expected to be permanently in place, or if the other countries are expected to retaliate with their own policies in the future.

6 Indeed, as prices become flexible, the border adjustment gives the US exporters an incentive to reduce the dollar export prices, while dollar appreciation gives the incentive for the reduction of the import prices charged by the suppliers to the US.

5. Lastly, the border adjustment policy and the ensuing appreciation should not result in any changes to the monetary policy stance. Indeed, if neutral, the policy should not affect the output gaps or the effective consumer price levels (even while reducing the trade prices in dollar terms). Therefore, monetary authorities that follow conventional Taylor rules should not want to adjust the rates in response to this fiscal policy change. If, however, monetary authorities also factor in the exchange rate movements in their decisions, and do not want to allow for large swings in the value of the dollar, they may respond, violating the condition for neutrality.

Clearly, the five conditions for neutrality stated above are not innocuous, and are likely to fail in reality. Below we discuss what may happen under different scenarios.

**Fiscal revenues** Consider for now that the conditions for neutrality are satisfied and that the dollar appreciates by the full amount needed to keep the relative trade prices and trade flows unchanged. This would result in no macroeconomic consequences from the border adjustment tax, apart from one. As we show in Barbeiro *et al.*(2017), this policy indeed results in an undistortive (*lump-sum*) transfer from the US private sector to the government budget in proportion with the trade deficit of the US. This may be viewed as the *magic* of the border adjustment tax. How does it happen? To understand the mechanism, consider a hypothetical case in which the US household sector holds net foreign assets (NFA) against the rest of the world in foreign currency to support a permanent trade deficit. This does not violate the neutrality assumptions. Then the dollar appreciation induced by the border adjustment will result in a capital loss for the US household sector – their foreign currency NFA have less purchasing power in the US market with unchanged consumer price level in dollars. At the same time, the purchasing power of the US economy, as a whole, from the rest of the world does not change, as the import prices in foreign currency stay the same. This gap in valuations goes to the US government, which introduces a wedge between the border price paid to the foreigners and the domestic price paid by the US consumers. Effectively, this lump-sum transfer from domestic households to the government is a *capital levy* on their stock of NFA in the face of an unanticipated dollar appreciation.

This levy is transferred to the government in flow terms, as the US households convert their stock of NFA into a flow of trade deficits.[7]

This analysis has a number of implications. First, while the fiscal revenues are positive in periods of trade deficits, they are negative in periods of trade surpluses, exactly in proportion to the size of the trade imbalance. Second, in order for the intertemporal budget constraint of the US to be satisfied, the net present value of trade deficits must be equal to the initial net foreign asset position. Since the US has currently a negative net foreign asset position, the US must run a cumulative trade surplus in the future. This means that the overall transfer would be away from the government budget and towards the private sector, so the policy would reduce the government revenues over the long run.[8]

**International transfer** Under neutrality, the border adjustment tax involves no international transfers – neither towards, nor away from the US. This, however, is no longer the case when some of the gross international assets or liabilities are in the home currency (the dollar), violating one of the conditions for neutrality. This is due to the capital gain against the rest of the world on the dollar asset holdings resulting from a dollar appreciation. Since for the United States, the foreign assets are mostly in foreign currency, while foreign liabilities are almost entirely in dollars, this would generate a massive transfer to the rest of the world and a capital loss for the US of the order of magnitude of 10% of the US annual GDP or more.[9] This capital loss would reduce the purchasing power of the US in terms of the foreign goods.

**Long-run departures from neutrality** An essential requirement for the border adjustment neutrality is that the tax extends uniformly to all imports, while the subsidy extends uniformly to all exports. This condition is likely to fail in practice. First, it would fail for a number of service sectors, such as tourism and education, which serve foreigners inside the US. These sectors would be squeezed by a dollar appreciation, which would not be offset by the export subsidy.[10]

7 Under the further assumption of Ricardian equivalence, this distributional shift from households to the government budget has no macroeconomic consequences, and neutrality is maintained. Nonetheless, the private wealth of the holders of the foreign currency assets will be reduced in proportion with the dollar appreciation.

8 See also Olivier Blanchard and Jason Furman "Who Pays for Border Adjustment? Sooner or Later, Americans Do" and Brad Setser and David Kamin "Just How Much Money Should the Border-Adjusted Tax Raise Be Expected To Raise?"

9 We make this calculation in Emmanuel Farhi, Gita Gopinath and Oleg Itskhoki "Trump's Tax Plan and the Dollar."

10 See Stan Veuger "How border adjustment threatens the education, real estate, and hospitality industries."

Perhaps more importantly, there is a likely departure from uniform taxation of imports, if the border adjustment tax is introduced as a part of the corporate tax. In the US, a considerable share of employment and production is done by *S-corps*, which in contrast to *C-corps*, are not subject to the corporate tax, but instead subject to the personal income tax of the owners. The proposed policy would create incentives for imports to be brought into the US by the S-corps in a non-taxable way, resulting in the border adjustment tax not applying to a sizeable portion of the US imports.

**Short-run departures from neutrality** One of the key requirements for the neutrality of the border adjustment tax in the short run, when prices are inflexible, is that the tax together with the dollar appreciation would immediately bring down the dollar border prices paid by and charged to foreigners. If this does not hold, the prices of the traded goods would increase relative to the domestically produced goods, both in the US and in the rest of the world, discouraging both imports to and exports from the US. The empirical pattern of the US trade is that of *dollar currency pricing* for both imports and exports (see Gopinath et al. 2010). That is, the majority of the contracts governing US import and export flows are preset in US dollars and adjusted infrequently, about once a year. Unless these terms are renegotiated fast after the policy is in place, the relative cost of imported inputs would go up in the US because of the effective import tax associated with border adjustment and given the unchanged dollar import prices. More expensive imports will translate into higher consumer prices in the US. Exports will also become more expensive relative to foreign-produced goods because of the dollar appreciation. The US exporters will benefit from greater profit margins in view of the export subsidy associated with the border adjustment, but they are also likely to lose export market shares from the dollar appreciation, before they reduce their dollar prices.[11]

11 We discuss these mechanisms further in Mary Amiti, Oleg Itskhoki and Jozef Konings "Why the Proposed Border Tax Adjustment Is Unlikely to Promote U.S. Exports." In case where the dollar appreciation is small relative to the border adjustment tax, the US exports may increase in the medium run, as dollar prices start to fall in response to the tax. In simulations in Barbeiro *et al*. (2017), we find however that a large dollar appreciation is still a likely scenario, even in cases when the exact neutrality of the border adjustment tax does not hold.

Therefore, US exports are unlikely to increase in response to border adjustment tax, and instead will likely fall together with US imports in the short run, with no clear effect on the trade balance. As trade prices adjust over time, both imports and exports will recover, resulting in a neutral long-run effect of the border adjustment tax on trade.[12]

**Retaliation** Lastly, we address the issue of retaliation by foreign countries. There are two types of retaliation: (i) a tariff war or a WTO litigation; and (ii) a monetary policy response in the rest of the world. We focus here on the second type of response.[13] A large dollar appreciation may pose a threat to the banking system in multiple countries, where banks have significant dollar-denominated liabilities and foreign currency assets. Under these circumstances, the monetary authorities in these countries will be under pressure to limit the size of the devaluation of the of their currency against the dollar (see Rey 2013). If they act to raise interest rates to limit the dollar appreciation, this will result in a departure from the neutrality of the border adjustment policy, and moreover in a likely global economic slowdown due to the tightened monetary policy stance.

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12 More generally, to the extent that the dollar plays the central role in international trade contracting, a dollar appreciation will result in a negative shock to global trade, akin to a temporary tariff on all international trade flows, before the dollar prices adjust downwards (see Casas *et al*. 2017).

13 For the discussion of trade retaliation, see Chad P. Bown "Will the Proposed US Border Tax Provoke WTO Retaliation from Trading Partners?"

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## About the authors

**Mary Amiti** is an Assistant Vice President at the Federal Reserve Bank of New York. Prior to joining the Bank, she held positions at the International Monetary Fund, World Bank, the University of Melbourne, and the University of Pompeu Fabra. She graduated with a PhD in Economics from the London School of Economics in 1997, with a specialization in international trade. She has published in leading journals such as the *American Economic Review*, *Journal of Political Economy*, *Quarterly Journal of Economics*, *Review of Economic Studies*, *Review of Economics and Statistics*, and *Journal of International Economics*. She has written widely on the effects of trade liberalisation on productivity, wages, the wage skill premium, product quality and prices. Her research interests also include exchange rate pass-through and trade finance.

**Emmanuel Farhi** is a Professor of Economics at Harvard University. His research focuses on macroeconomics, finance, international economics, and public finance. His papers have been published in leading journals including the *American Economic Review,* the *Journal of Political Economy,* the *Quarterly Journal of Economics*, the *Review of Economic Studies* and the *Journal of Financial Economics*. He is a member of the French Economic Analysis Council to the French Prime minister, a Research Associate at the National Bureau of Economic Research, the Center for Economic Policy Research, the International Growth Centre, as well as a Fellow of the Toulouse School of Economics. He was awarded his Ph.D. by the Massachusetts Institute of Technology (MIT) in 2006.

**Gita Gopinath** is the John Zwaanstra Professor of International Studies and of Economics at Harvard University. Her research focuses on International Finance and Macroeconomics. She is a visiting scholar at the Federal Reserve Bank of Boston, member of the economic advisory panel of the Federal Reserve Bank of New York, Economic Adviser to the Chief Minister of Kerala state (India), a Managing Editor of the Review of Economic Studies, co-editor of the current Handbook of International Economics, and a research associate with the National Bureau of Economic Research She also served as a member of the Eminent Persons Advisory Group on G-20 Matters for India's Ministry of Finance. In 2011, she was chosen as a Young Global Leader by the World Economic Forum. Before coming to Harvard, she was an assistant professor of economics at the University of Chicago's Graduate School of Business.

**Oleg Itskhoki** is a Professor in the Department of Economics and at the Woodrow Wilson School, as well as the Richard Allen Lester University Preceptor and a Sloan Research Fellow. His research interests are in the fields of Macroeconomics and International Economics. His research was supported by a National Science Foundation grant and his work is published in *American Economic Review*, *Econometrica*, *Quarterly Journal of Economics*, and *Review of Economic Studies*. Oleg is a Faculty Research Fellow at the National Bureau of Economic Research and Research affiliate at the Centre for Economic and Policy Research. Education: BA, Moscow State University 2003; MA, New Economics School (Moscow) 2004; PhD, Harvard University 2009.

# 10 Central bank independence: Growing threats

**Stephen G. Cecchetti, Kermit L. Schoenholtz**
Brandeis International Business School, CEPR & NBER; NYU Stern School of Business

> *The independence of the central bank to set a monetary course separate from the day-to-day of electoral politics is as fragile as it is essential.*
>
> *Peter Conti-Brown (2016)*

Central banks are rarely popular. When policymakers lower interest rates, savers complain; and when they raise them, borrowers are unhappy. Not only that, but as guardians of financial stability, they can appear to be helping commercial bankers – a group that is widely disliked. With the rise in populist sentiment, it is natural to ask what sort of criticism the US central bank will face and whether its independence will be threatened.

Our concerns arise from statements made by President Donald Trump during the campaign, from legislative proposals made by various Republican members of Congress, and as a result of Fed criticism from those likely to influence the Administration's policies.

Recall that, during the campaign, then-candidate Trump attacked Federal Reserve Board Chair Janet Yellen, saying that she and her colleagues were keeping interest rates low to support President Barack Obama (Mui 2016). President Trump will have remarkable latitude to remake the Federal Reserve Board in his image.

As of May 2017, there are three openings on the Federal Reserve Board. By next year, we expect that most of the incumbents will exit, leaving the President to appoint the majority of the seven-member Board, including its Chair and two Vice Chairs. Will these Trump appointees set policy to ensure 'maximum employment, stable prices, and moderate long-term interest rates', as the Federal Reserve Act mandates? We hope so, but that is far from clear.

One concern is that President Trump or his Cabinet will interfere in the work of the Federal Reserve by arguing for or against specific policy actions. It is easy to envision cases in which the executive branch of the federal government would blame independent monetary policymakers when things go wrong.

Were the Administration to become openly critical of monetary policy, it would break a lengthy tradition that has helped to keep US inflation expectations low and stable. At least since President Reagan, US commanders in chief and their appointees typically have refrained from commenting on monetary policy in public.

An innovation of the last quarter of the 20th century, central bank independence remains controversial in the United States. It requires the delegation of powerful authority to a group of unelected officials. In a democracy, this anomaly naturally raises questions of legitimacy. It also raises fears of the concentration of power in the hands of a select few. Since the nation's founding, such fears have punctuated the history of US central banking.

But, in recent decades, many leaders in Washington, DC, came to appreciate an independent central bank as a device to overcome the problem of *time consistency*: the concern that policymakers will renege in the future on a policy promise made today. Keeping inflation low *and* stable requires a credible policy commitment to price stability that will, from time to time, be highly unpopular. When inflation rises, the central bank must promptly raise interest rates, occasionally quite sharply. And, should deflation threaten and the policy rate approach zero, the central bank may need to use both its balance sheet flexibility and its power to commit to a future interest rate path.

In these ways, an independent central bank improves economic performance: it can achieve a lower and more stable inflation rate without sacrificing long-run economic growth.[1]

With the financial crisis of 2007-2009, an earlier rationale for central bank independence also re-emerged: the need to prevent or limit panics. This was in fact the original reason for creating the Federal Reserve System in 1913 (Lowenstein 2015). For a central bank to serve as the lender of last resort, as leading central banks did in the recent crisis, it must have some degree of independence. In particular, it must *delay* disclosure about the recipients of its funds: otherwise, banks worried about being seen as fragile will not borrow, perpetuating the financial system's liquidity shortfall and the panic. At the same time, the central bank must not lend to *insolvent* banks; otherwise, the stigma associated with borrowing will discourage solvent, but illiquid banks, from seeking funds.

Experience shows that all these actions can trigger popular discontent. For legislatures, maintaining such unpopular commitments is difficult when the benefits only arise over a horizon longer than an electoral cycle. Not only that, but Congress has had difficulty resisting the temptation to raid the US central bank's capital to meet shortfalls. The late-2015 legislated transfer of tens of billions of dollars from the Fed to the general treasury to fill a hole in the transportation budget is just the most recent example.[2]

In practice, there is an unavoidable conflict between democratic legitimacy and policy effectiveness. A legislature is legitimate by virtue of its election. But it is not an effective place for making monetary or financial stability policy decisions. It is nearly impossible for parliamentarians to make promises that future legislators will sustain, thus their policies will typically fail the time-consistency test.

While an independent central bank can make decisions about interest rates, lending, and balance sheet composition with a longer perspective – credibly committing itself to act in particular ways in the future – doing so requires a legal framework that establishes its authority. So, the designers of independent central banks focus on how to make them politically legitimate without undermining their ability to make credible policy commitments.

1 For a summary, see Fischer (2015).

2 See US General Accounting Office (2017) page 2.

Again, in practice, one precondition for delegating monetary policy to an independent institution is that policymakers' actions do not have *first-order* distributional effects, transferring large shares of income or wealth between groups in society. Granted, every central bank action affects relative prices, so there will always be winners and losers. Indeed, until the Fed was created in 1913, opposition to a US central bank often came from farmers who feared that a bankers' bank would inevitably favour big-city lenders over rural borrowers. Today, it is more widely believed (and publicly accepted) that the *primary* impact of interest rate changes is on macroeconomic quantities such as output, employment and the aggregate price level; and that this impact is not principally a result of distributional shifts.

In a democracy, we typically assign policies that are purposely and predominantly distributional to elected officials. Tax policies are not only about paying for public goods, but also about discouraging certain activities and subsidising others.[3]

There are two key elements of an effective design of an independent central bank: (1) a legislative mandate that defines and limits the central bank's goals and powers; (2) procedures that ensure transparency and political accountability.

In a democratic society, even independent central banks do *not* set their own goals. In practice, what they often do is interpret their legislative mandates in ways that help ensure their accountability. For example, all central banks have price stability as a key goal of monetary policy given to them by elected officials. Today, central banks in countries accounting for two thirds of global GDP announce numerical inflation objectives based on specific price indices. These are a means to operationalise the goal of price stability and to allow the success or failure of central bank policies to be easily monitored. The Federal Reserve's 'dual mandate' is specified by the Federal Reserve Act and has been made operational by the Federal Open Market Committee's annually reconfirmed 'Statement on Longer-Run Goals and Monetary Policy Strategy' (Federal Open Market Committee 2017).

3 See Tucker (2016) for a detailed discussion of the principles of delegation.

Independent central banks *do* have delegated authority to achieve their legally mandated goals. That is, they have *instrument independence*, which enables them to set policy using specified financial instruments without risk of reversal by another arm of government. But even this power must be limited so that a central bank does not take over functions that are chiefly fiscal. Among other things, that means restricting the assets the central bank can buy and sell, as well as forbidding the central bank from acquiring assets directly from the Treasury (to prevent *fiscal dominance*, in which the government controls the issuance of central bank liabilities to meet its funding needs).

The second key element of good central bank design is a transparent framework that permits effective accountability. If the central bank's goals and operational principles are well-defined, then the legislature and the public can hold it responsible for its actions.

For the most part, transparency also makes central bank policy more effective. In the case of monetary policy, a quantitative inflation target helps households and businesses anticipate monetary policy choices so that these choices are transmitted more rapidly to the economy through financial markets. Anchoring inflation expectations also reduces systematic risk in the economy, letting households and businesses make decisions without being overly concerned about temporary disturbances in aggregate prices. In the case of financial stability, transparency about prospective threats to the resilience of the system can lead investors and intermediaries to take helpful precautions by seeking appropriate compensation for risk.[4]

The financial crisis has made it more difficult to find the balance between legitimacy and effectiveness in designing an independent central bank. There are two reasons, both related to the central bank's financial stability mandate. First, the distributional impact of financial stability policy is often more central to its effectiveness than is the case for monetary policy. Second, the transparency required for appropriate accountability is much more difficult to achieve.

4 Too much transparency can undermine the function of a central bank. For example, in the case of monetary policy, the publication of meeting transcripts (even with a lag) diminishes the give-and-take of ideas needed for a policy committee to make the best choices. See Warsh (2016) for a discussion.

To understand the first problem, consider the case of a real estate boom that, left unattended, will turn into a bust. The short-run impact is to increase the (apparent) wealth of homeowners, as well as the fortunes of those in the construction and real estate businesses. Overall, this is good for short-run growth, employment and prosperity. Now, assume that there exists a regulatory tool – such as a cap on the loan-to-value (LTV) ratio or the debt-to-income (DTI) ratio – that reduces the amplitude of both the boom and the bust. Unless the benefits of using this tool occur *within* the electoral cycle, a legislature will be reluctant to dampen a boom. Yet, history suggests that credit-driven property price booms create systemic risk that can ultimately result in financial crisis (Jordà, Schularick and Taylor 2016).

Turning to the second problem, note that – compared to monetary policy – it is difficult to define the financial stability mandate in a quantitative fashion that makes it amenable to transparency and accountability. Should we say that we wish to reduce the probability of a financial crisis that lowers GDP by 4% (as in the US case of 2007-2009) so that it is expected to occur only once in 50 years? 100 years? 1000 years?

Unfortunately, we currently lack the ability to anticipate the resilience of the financial system adequately to make this 'quantitative goal' operational (or subject to easy monitoring). This is especially true if judging the state of the system requires knowledge of the privileged information about individual institutions that a financial supervisor cannot disclose. As a result, outside observers will find it difficult to readily assess the progress toward financial stability. However complex, measuring price stability, understanding the impact of interest rate changes, and communicating monetary policy's objectives and means in a transparent and effective manner are far simpler.

All of this brings us to the fact that it isn't easy to sustain the credibility of an institution led by unelected officials in a democracy, if people do not understand it or – worse – fear that it constitutes an unwarranted concentration of power. To make an independent central bank work, political leaders must delegate the necessary powers and establish an oversight regime that ensures accountability without undermining the institution's policy effectiveness.

In the end, central bank independence requires strong political support. To deliver low inflation, maximum employment, and financial stability, Federal Reserve policymakers need the strong support of the rest of the government. Here we are worried. As former Minneapolis Federal Reserve Bank President Narayana Kocherlakota (2016) wrote recently, "*There is absolutely nothing in US law preventing [President] Trump from violating the Fed's independence, a post-1979 development that rests largely on the restraint of the president. Will Trump show this restraint? We'll see*."

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## About the authors

**Stephen G. Cecchetti** is Professor of International Economics at the Brandeis International Business School, Research Associate of National Bureau of Economic Research and Research Fellow of the Centre for Economic Policy Research. In addition to his other appointments, he has served as economic adviser and head of the monetary and economic department at the Bank for International Settlements, director of research at the Federal Reserve Bank of New York and editor of the *Journal of Money, Credit, and Banking*. Cecchetti has published widely in academic and policy journals, is the author of a leading textbook in money and banking, and blogs at www.moneyandbanking.com.

**Kermit L. Schoenholtz** is Professor of Management Practice in the Economics Department of the NYU Stern School of Business, where he teaches courses on money and banking and macroeconomics and directs the Stern Center for Global Economy and Business. Previously, Schoenholtz served as Citigroup's global chief economist from 1997 until 2005. He received an M.Phil. in economics from Yale University in 1982 and an A.B. from Brown University in 1977. He is a member of the Financial Research Advisory Committee of the U.S. Treasury's Office of Financial Research, a panel member of the US Monetary Policy Forum, and a member of the Council on Foreign Relations.

# 11 Potential changes in financial regulation in the Age of Trump

**Thomas F. Cooley and Lawrence J. White**
Stern School of Business, NYU[1]

## Introduction

The scarring experience of the financial crisis of 2008 – as well as the federal government's actions, that same September, to avert widespread chaos in the financial system – remain a stark reminder that the US approach to regulating risks in the financial system had failed. The Dodd-Frank Act was enacted in 2010 as a response to the crisis and in an effort to prevent future such crises from occurring. But, from the beginning, the Dodd-Frank Act was controversial because of its scope and complexity. In the Age of Trump it presents an inviting target for the administration's declared war on the 'administrative state'.

The Trump Administration has announced its intentions – in the name of financial deregulation – to roll back the Dodd-Frank Act. The legislative vehicle for this attack could be the proposed Financial CHOICE Act, which was introduced in the House Financial Services Committee, and may provide a blueprint for the Administration's efforts.

1 The authors are, respectively, the Paganelli-Bull Professor of Business and International Trade, emeritus, and the Robert Kavesh Professor of Economics at the NYU Stern School of Business. This paper draws on Regulating Wall Street: CHOICE Act vs. Dodd-Frank, which is a recently published collection of essays by NYU Stern and Law School faculty on the proposed CHOICE Act, to which both authors contributed.

Of course, it is always difficult to predict actions in the political environment of Washington – and this is even more true in the current environment. Nevertheless, with a Republican President in the White House and the Republican Party controlling both Houses of Congress, the Financial CHOICE Act is worthy of serious evaluation.

To provide some context, a brief overview of the Dodd-Frank Act is in order.

## A high-level summary of the Dodd-Frank Act

The scope of Dodd-Frank is vast, covering everything from consumer financial protection to executive compensation in the financial sector, to the origins of 'conflict minerals'. It outlined approximately 390 rulemaking requirements, of which roughly 80% have been met.

An objective of Dodd-Frank was to identify sources of systemic risk, identify systemically risky institutions, establish ways of monitoring systemic risk in the financial system, limit excessive risk-taking by financial institutions, and provide a roadmap for resolving insolvent institutions. To achieve these goals, Dodd-Frank created a new multi-agency organisation – the Financial Stability Oversight Council (FSOC) – to monitor systemic risk and identify 'systemically important financial institutions' (SIFIs). The legislation increases equity financing requirements for large banks (with additional requirements imposed on SIFIs) and requires regulators to conduct regular stress tests to assess the robustness of bank (and non-bank SIFI) equity levels in a crisis. It tried to limit the accumulation of systemic risk via the Volcker Rule. It requires large financial institutions to file resolution plans ('living wills') and outlined an 'orderly liquidation authority' (OLA) to provide a roadmap and a mechanism for unwinding insolvent firms with minimal disruption to the system.

But the shortcomings of Dodd-Frank were many. It missed a golden opportunity to simplify and rationalise the very balkanised US regulatory architecture, where responsibility is spread across many institutions, some with overlapping authority. Dodd-Frank did not sufficiently address the issue of the capital adequacy of financial institutions. Its proposals for the orderly liquidation of insolvent institutions were questionable.

The proposed Volcker Rule was complicated and difficult to implement, and it became clear that proprietary trading and investing activities were not at the root of the financial crisis. Dodd-Frank did not address the problems of the giant mortgage securitisers Fannie Mae and Freddie Mac (which are often described as 'government-sponsored enterprises', or GSEs) or housing finance. It did not address the problem of pricing government guarantees (deposit insurance, lender of last resort access, too-big-to-fail guarantees). It limited the lender of last resort (LOLR) authority of the Fed, constraining its ability to respond in a crisis.

The result of the regulatory reform process that Dodd-Frank initiated, to date, has been a vastly more complicated regulatory structure, that many doubt is adequate to forestall the next crisis and that some blame for the demise of many small community banks (institutions that are not viewed as part of the systemic problem) and a decline in bank lending.

## The backlash

These shortcomings are at the root of the current backlash. This backlash is manifest in President Trump's Executive Order of February 3, 2017, which outlines 'core principles' that are to guide financial regulation in the United States and directs the Treasury Secretary and the FSOC to report on how current regulations fit those core principles. And the backlash is manifest in the Financial CHOICE Act – which (like Dodd-Frank) tries to address many issues (of which we can cover only a few).

## The Financial CHOICE Act

The Financial CHOICE Act begins with an appealing premise: If banks are well capitalised and well managed, they do not pose a threat to the financial system. Accordingly, the CHOICE Act would offer an 'off-ramp' from Dodd-Frank regulations to well-managed banks that maintain adequate levels of equity capital.

However, the CHOICE Act is also premised on the beliefs that: a) financial intermediaries (such as banks) are systemic only because the FSOC – the committee created by Dodd-Frank – has designated them as 'systemically important financial institutions' and, thus, has anointed them as 'too big to fail'; and b) that eliminating the SIFI designation would eliminate government bailouts of such institutions (or, really, of their creditors).

These latter premises fail to withstand close scrutiny: In the 2008 crisis, the five large stand-alone investment banks (Bear Stearns, Goldman Sachs, Lehman Brothers, Merrill Lynch, and Morgan Stanley) experienced bank-like runs and threatened to pull down other large financial institutions because they had too little equity financing and were too illiquid. Three of the five no longer exist as separate banks. The SIFI designation hadn't even come into existence, and no one was sure whether or how the federal government would act to stabilise the financial system.

Further, there is no way that any current congressional action could bind a future Congress from taking actions – including bailouts – in response to a future financial crisis.

Would adequate equity capital forestall the need for regulation? Certainly, adequate equity levels can lower the probability of a crisis; but the CHOICE Act's level – a 10% ratio of equity financing to the institution's assets – is way too low, especially for large institutions. Further, that ratio is wholly insensitive to the riskiness of the institution's assets. And, by cuttin back on forward-looking stress tests for large institutions – especially banks – the Act would make these large institutions (and thus the financial system) less robust to unexpected shocks.

## The special problem of dealing with large, complex but failing institutions

The Act would limit federal regulators' abilities to deal effectively with large institutions if they did get into financial difficulties, since the Act would eliminate the institutions' living wills that would provide a guide for regulators' emergency actions and the OLA that the wills would guide, as well as the temporary financing that could be crucial to preventing creditor runs in crisis situations.

The CHOICE Act argues that insolvent institutions should be addressed, instead, with the use of the Federal Bankruptcy Code. This is a position that has been the subject of lively debate in the academic and legal literature. Of course, this would require a new Chapter of the Bankruptcy Code to address the unique problems of large systemic financial institutions. Advocates of the bankruptcy approach argue that: it is administered through the judicial system and is less subject to regulatory discretion; it provides more certainty about how creditors will be treated in bankruptcy; and it does not require taxpayer funds to reorganise or liquidate a failed institution.

These are all valid points. However, some of these may offer a distinction without a difference, as the OLA was always intended to adhere as closely as possible to the Bankruptcy Code. It is also the case that in bankruptcy, someone has to provide debtor-in-possession financing, and this is not spelled out by the CHOICE Act. Further, bankruptcy can be a slow, grinding process, which can create extended value-destroying uncertainty (as was illustrated all too well in the case of the Lehman bankruptcy) for the liability holders who may have claims on a beleaguered financial institution that total in the hundreds of billions of dollars.

An alternative route to resolving insolvent institutions – not addressed by the CHOICE Act – is to build rule-based recapitalisation directly into the capital structure, as well as imposing upfront capital requirements that are tied to systemic risk. This alternative uses bail-in-able debt that can be converted to equity if a firm becomes insolvent. Bail-in-able debt has been enthusiastically embraced in Europe in the form of contingent-convertible (Co-Co) bonds and total loss absorbing capacity (TLAC) debt.

There are many issues raised by this approach as well, including triggers for conversion, accounting standards for the assessment of equity, and valuations in a distressed environment. The first line of defence against insolvency is always higher equity. But the appeal of automatic recapitalisation is that it relies less on external funding and administrative discretion.

## The CHOICE Act and the Federal Reserve

As did Dodd-Frank, the CHOICE Act places additional limitations on the ability of the Federal Reserve to respond in a crisis. But the Act also would interfere with the Fed's wider role in setting monetary policy. This is a battle that has been simmering in Congress for a long time, and whether it finds favour in the Trump administration is hard to predict. If these new restrictions are enshrined in this legislation, they may well impede effective monetary policy in the US

## Some neglected areas

The CHOICE Act largely ignores the possibility that non-banks that conduct banking-like activities – which we describe as '*de facto* banking' (and others call 'shadow banking') – could be a source of systemic risk. But, recall that in 2008 those five large *investment* banks were outside of the regular bank regulatory system and were only lightly supervised by the Securities and Exchange Commission (SEC). Similarly, the GSEs were outside the bank regulatory system, as was the large insurance conglomerate AIG. And today the money market mutual fund industry – which needed federal guarantees in 2008 – does not get the more rigorous regulatory scrutiny (which ought to include a minimum equity financing requirement) that is applied to banks.

In addition, like Dodd-Frank, the CHOICE Act fails to offer a significant simplification of the highly complex structure of American financial regulation.

Finally, like Dodd-Frank, the CHOICE Act neglects to 'bite the bullet' and address the resolution of the GSEs, nor does it propose any approach toward a more sensible system of housing finance.

## Hobbling financial regulation – and other regulation – more generally

Two additional troubling features of the CHOICE Act would: a) require that the Congress approve all major (i.e., with an economic impact that exceeds $100 million) regulations; and b) eliminate what is known as the 'Chevron' deference to regulatory agencies.

Both features would greatly hobble financial regulation going forward (and parallel legislation has been introduced that would apply both of these features to US regulation more widely).

The requirement that Congress approve all major regulations would greatly restrict the ability of agencies to regulate effectively, as well as being an extremely poor use of the Congress's time and energies. The Chevron deference was established by the US Supreme Court as a way of making all forms of regulation more effective (and more uniform in interpretation) by generally deferring to regulatory agencies the interpretation of legislation and statutes (rather than having federal courts always separately interpreting these statutes *de novo*).

With respect to both provisions: the important idea is that legislators can't know and specify in legislation the details of financial arrangements or environmental dangers; they can, however, signal intent, and the agencies can fashion regulations to meet that intent. Eliminating this delegation and deference would amount to a broad-based attack on regulation throughout the government – not just the financial sector.

## Conclusion

Financial regulation in the Age of Trump might bring some welcome simplification from the acknowledged mess of the Dodd-Frank Act. Regulations that are appropriate for large systemic institutions do impose a large burden on smaller players in the system. But the framers of the Dodd-Frank Act did get one major thing right: They recognised the critical role of systemic risk, and they created a system to measure and monitor it. If destroying the administrative state means completely disassembling the institutions for monitoring and measuring systemic risk, it would be a major step backward: *it would make our financial system less safe and less robust*.

Again, it is far from clear whether any legislative action will be able to emerge from the Congress in the current political climate. There may be only the limited actions that the Trump Administration can undertake on its own through Executive Orders and changes in regulations and appointed regulators. We can only hope that sensible thinking about the fundamentals of safety and stability for the financial system will carry the day with respect to any forthcoming actions.

## About the authors

**Thomas F. Cooley** is the Paganelli-Bull Professor of Economics emeritus at the Leonard N. Stern School of Business at New York University, as well as a Professor of Economics in the NYU Faculty of Arts and Science. Prior to his academic career, he was a systems engineer for IBM Corporation. A Research Associate of the National Bureau of Economic Research and a member of the Council on Foreign Relations he is also the former President of the Society for Economic Dynamics, a Fellow of the Econometric Society and holds an honorary doctorate from the Stockholm School of Economics. He is a widely published scholar in the areas of macroeconomic theory, monetary theory and policy and the financial behaviour of firms. He has been a senior advisor and member of the Board of Managers of Standard & Poors since December 2010. He also writes frequent opinion columns for Forbes.com.

**Lawrence J. White** is Robert Kavesh Professor of Economics at New York University's Stern School of Business. During 1986-1989 he was on leave to serve as Board Member, Federal Home Loan Bank Board, in which capacity he also served as Board Member for Freddie Mac; and during 1982-1983 he was on leave to serve as Director of the Economic Policy Office, Antitrust Division, U.S. Department of Justice. He is the General Editor of the *Review of Industrial Organization* and was Secretary-Treasurer of the Western Economic Association International (2006-2009). Professor White received the B.A. from Harvard University (1964), the M.Sc. from the London School of Economics (1965), and the Ph.D. from Harvard University (1969).

# 12 How fast can we grow - and why that matters

**Jay Shambaugh**
George Washington University and NBER

Economic growth can seem both exceedingly important – livelihoods, retirement savings, and personal well-being can seem to bounce with the vagaries of economic growth – and yet entirely inscrutable – economists famously fail to forecast major turning points in the economy, and crucial components of growth, such as productivity growth, are effectively statistical residuals subject to mismeasurement and confusion. Still, understanding what reasonable growth rates can be achieved and what policy levers may or may not contribute to those growth rates is crucial to sound US economic policy. Some Trump Administration officials have argued that growth will pay for tax cuts, and the President, at times, has said growth could be 4, 5, or even 6% a year.[1] This chapter examines the feasibility of such growth over the long term.

## Cyclical versus long-run growth

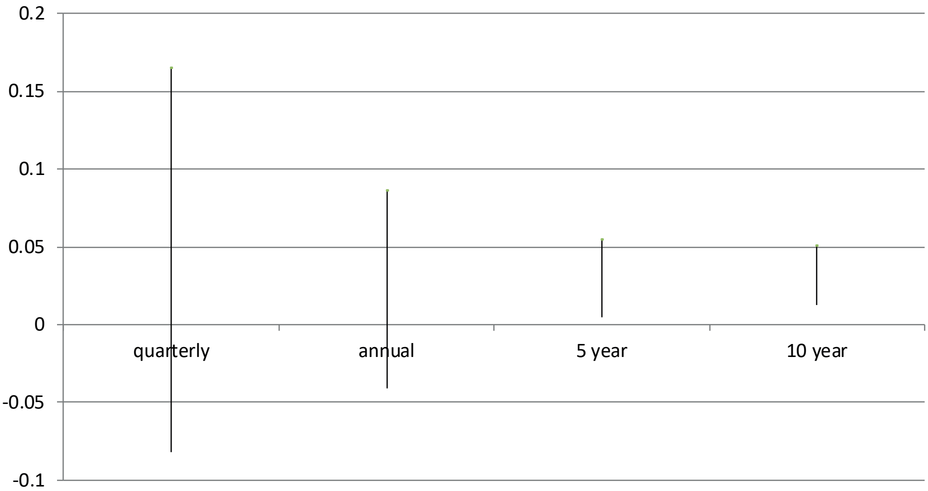
It is important to distinguish between the feasible long-run growth rate that an economy can achieve, based on changes in resources and productivity which may be impacted by regulatory, tax, and government investment policies, on the one hand, and year-to-year fluctuations, that may represent booms and busts as well as cyclical macroeconomic policy, on the other. In any given year (or especially any given quarter), GDP growth can fluctuate widely, since both the utilisation of factors and their productivity may change as demand for goods and services changes.

1 Mui, Y.Q. (2016), "Donald Trump Keeps Moving the Goal Post for Economic Growth", Washington Post, December 29, 2016.

Over a longer horizon, though, the economy should operate near full employment (on average), and growth becomes a question of changes in labour force and the output per hour that labour can achieve.

As Figure 1 shows, quarterly US growth rates over the last 50 years range from -8% to +16%. That is, at a very high frequency (quarterly data), the range of growth outcomes is huge. At an annual frequency, the range is still quite large, from -4% to +9%. But, at a 5-year horizon, average annual growth ranges from just 0.5% to 5.5%, and, over ten-year horizons, the range is just 1.3 to 5%. Thus, if the question is can the economy grow 2, 3, 4 or even 6% next quarter, the answer certainly seems to be that it might. But, over longer horizons, growth is much more predictable; rather than being driven by cyclical swings, it is more a function of the underlying economic fundamentals.

**Figure 1** Range of annualised US GDP growth at different horizons, 1967-2016




## The basics of GDP growth

GDP growth can be reduced to two fundamental series: the number of hours worked and the amount of output produced per hour. In the short run, there may be fairly large fluctuations in the number of hours worked, if the unemployment rate is rising or falling sharply. Similarly, if demand is fluctuating for goods and services, but firms are slower to adjust their number of workers than their output, one could see productivity fluctuating widely as well.

## Growth of hours worked

Once the unemployment rate is at a low and stable level, though, any increase in output from hours worked must come either from changes in population or from changes in the share of people in the labour force. As we look at growth over the next decade in the United States, population growth will provide far less of a boost to overall output growth than it did in the past.

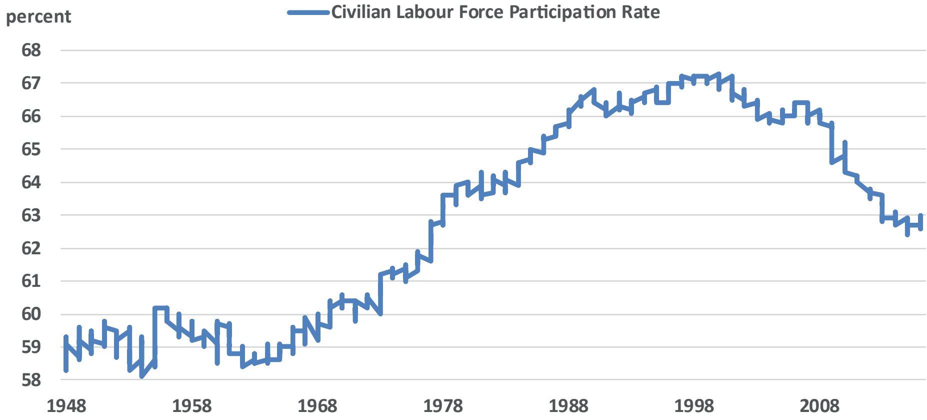
From the 1960s to the 1980s, the working-age population of the United States grew 1.4% at an annual rate, providing a strong tailwind to US growth, compared to just 0.6% at an annual rate so far in this recovery.[2] The United States also went through a period of rapid increases in the share of the population that was working. As Figure 2 shows, fifty years ago, 59% of the population was in the labour force; by 1997, nearly 67% of the population was working. In addition to the baby boomers hitting prime working age, there was a massive shift of women into the labour market, such that the labour force participation rate (LFPR) of prime age workers (25-54) was rising sharply (up from 71% in 1967 to 84% in 1997), despite the fact that the participation rate of prime age men had been on a long steady decline since the 1950s.[3]

Currently 63% of the population overall is in the labour force (82% of prime age workers). The aging of the workforce and retirement of the baby boomers have been pushing down this number by roughly .25 percentage point (p.p.) per year for the last decade and are set to continue to do so. As such, the last Obama Administration forecast suggested the population would grow 1% a year, but due to aging, the workforce would grow just 0.6% a year. This is notably lower than the 1.7% average annual growth rate in the 1980s, when both population growth and women's entry into the labour force helped GDP expand. It is just half the rate of the 1990s and even lower than the 1% growth rate in the 2000s. This suggests overall GDP growth in the range of 3.2% at an annual rate seen in the 1980s and 1990s may be unrealistic.

2 See Shambaugh (2016) for a discussion of the impact of demographics on the growth rate in the current recovery compared to previous ones.

3 See CEA (2016) for a discussion of the long run decline in prime age male LFPR.

**Figure 2.** US civilian labour force participation rate, 1948-2016




*source:* US Bureau of Labor Statistics

One offsetting factor would be if the labour force participation rate rose relative to demographic trends. This certainly can happen, as the entry of women into the labour force shows. Also, the US now has a relatively low prime age LFPR for both men and women when compared to other major economies, suggesting some room for improvement. Furthermore, LFPR fell somewhat faster than demographic trends since the crisis, implying there may still be room to rebound. But, it is important to recognise that most measurements of any 'cyclical' space for a rebound suggest that such room is exhausted. There may still be some room to rebound, but such space is likely less than one percentage point, perhaps allowing the LFPR to stay flat for 2-3 years rather than declining. That might add a few tenths of a percentage point to growth over the next 2-3 years, but would have only a small effect on growth over the decade as a whole, and no impact on growth in the latter half of this decade.

The broader decline in LFPR amongst prime age workers is a many decades' process, and not something one would expect to respond to cyclical (fiscal or monetary) policy. Instead, policies that improve wage outcomes for low-skilled workers, family-friendly policies to keep parents or caregivers in the workforce, education policies to raise skill levels, etc. could all play a role. But they are not silver bullets, and while they could have meaningful impacts on the lives of many people, they are not likely to operate on a scale that would drastically alter the macroeconomic picture.

Even a policy that lifted prime-age LFPR two percentage points (back to its peak) over a decade would increase LFPR overall by roughly 1 p.p. and lift GDP growth by between 0.1-0.2 p.p. per year.

In addition, while traditionally, both in the United States and around the world, people have worked fewer hours as the economy has gotten richer, this process has stopped in the United States. If the US labour market were to return to a decline in hours worked per worker by a small amount, that would put an even larger headwind on overall GDP growth.

## Growth in output per hour worked

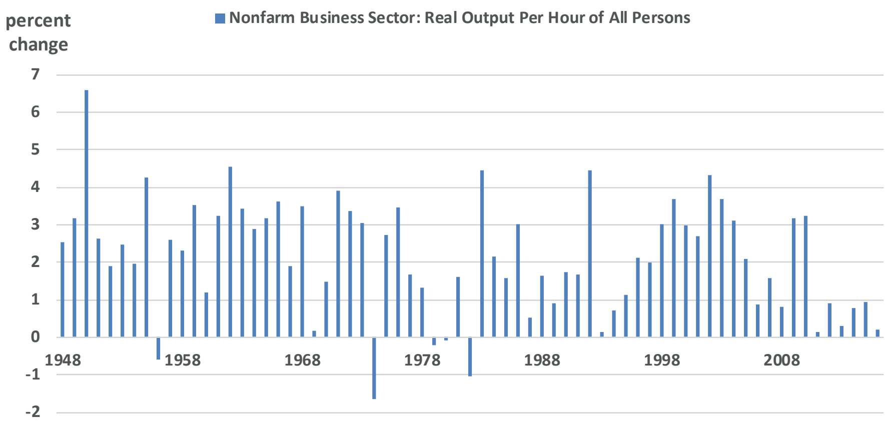
If the growth rate of the labour force suggests slower economic growth than in recent decades, the other possible lever is to increase the output produced per hour of work, or labour productivity. Labour productivity is a combination of the capital a worker works with, the technology used, the education and skill of the worker as well as the general economic institutional environment, but it can also be measured with substantial error, as productivity is effectively measured as a residual after adding up the resources used. Productivity can shift, not just because there have been new investments in capital or technology, but also due to shifts across industries or measurement issues such as the way profits are recorded across countries.

Given its multifaceted nature and measurement concerns, productivity can be notoriously difficult to predict. Figure 3 reveals eras of high productivity (e.g., from 1995-2004 with growth of 2.9%) and low productivity (e.g., 1973-1994 with growth of 1.5%). Over long sweeps of time, though, productivity is generally best predicted by its very long-run average.[4] The last decade has been a period of lower average productivity (1.3% annual growth rate since 2005).

4 In a simple regression of ten-year productivity growth on the prior ten years' productivity, growth generates a coefficient statistically indistinguishable from zero, but a constant (representing the full historical average) that is highly precisely estimated. See also Furman (2015) that shows that the mean squared error of a prediction of labour productivity is lowest when using the longest historical period to predict it.

One could imagine three broad scenarios for the next decade. First, we could remain stuck in something of a low productivity era – economists such as Robert Gordon have argued that the economy has exhausted some of the great productivity enhancing innovations and a low productivity growth future should be expected (Gordon 2016); we could jump to a new high productivity era; or one could simply forecast that productivity will likely revert to its long-run average. The differences between 1, 2.1, and 3% productivity growth obviously could cause substantial differences in the overall growth rate. Currently the Congressional Budget Office (CBO) takes a slightly pessimistic view relative to history, but one that still assumes a substantial jump from the recent past and predicts labour productivity growth of 1.7%.

**Figure 3.** US labour productivity growth, 1948-2016




*Source:* US Bureau of Labor Statistics

## How does this all add up?

Many current forecasts suggest a long-run growth rate of the United States around 2%. The median long-run forecast of the members of the Federal Reserve Open Market Committee is for 1.8% GDP growth, the CBO currently forecasts 1.9% real GDP growth in the long run, and the Blue Chip survey of forecasters averages 2.2%. The Obama Administration forecast an average growth rate of 2.2%, but was explicit that this included a roughly 0.3 p.p. wedge of faster growth due to the implementation of various policies that could increase growth, implying a lower non-policy baseline.

Suggestions that the US economy could grow at 4% for a sustained period of time must grapple with the fact that this requires either very fast productivity growth on a level rarely seen in the US economy, or some sort of radical swing in labour force participation. Both would be clear outliers in history. Jason Furman has noted that to achieve even 3% growth, one would need both a productivity outcome in the top 10% in US history – a sharp break from the recent past – and a persistent improvement in LFPR that pushed back against demographic trends and kept the overall rate constant, something that might be very difficult to achieve over a ten-year period.[5]

Growth at 3% then is possible, but it is very hard to view it as the most likely outcome. Growth of 4% is possible in any given quarter, but beyond that, with the lack of room to lower the unemployment rate and the demographic factors pushing on participation, it is virtually impossible to imagine sustained growth of 4% without a truly historic productivity growth. Furthermore, these projections assume continued immigration. If immigration were to be curtailed substantially, growth would be even slower.

## Why this matters

Growth in GDP is important for living standards over time, but accurate realistic assessments of how fast the economy can grow are also crucial as they underpin both revenue forecasts and assessments of whether policymakers should be trying to push the economy to grow faster. The Office of Management and Budget estimates that growth 1 p.p. slower generates a cumulative deficit of over $3 trillion over a decade.[6] Thus, if growth is projected at 3% but turns out to be 2%, tax cuts or spending that looked affordable suddenly become sizeable fiscal mistakes. While optimistic goals and hopeful estimates of policies abound, it is crucial that fiscal forecasts do not rely on highly unlikely scenarios.

Understanding the feasible growth rate is also crucial as it helps guide whether fiscal stimulus is needed. If you believe the economy should be growing at 4%, deficit-financed tax cuts or spending may be sensible policy when the economy is growing at 2%.

5 Furman (2017)

6 See https://obamawhitehouse.archives.gov/sites/default/files/omb/budget/fy2017/assets/ap_2_assumptions.pdf table 2-4

But, if 2% is the potential growth rate, stimulus may make far less sense, as it is more likely to push the economy towards inflation. In some sense, the crucial question is what the Federal Reserve believes the speed limit is for the economy. If the government pushes the economy to grow faster than the Federal Reserve believes is consistent with its price stability mandate, the Fed would likely tighten monetary policy and head off the faster growth. This fact makes it even less likely that the economy can grow 3-4% over the next decade.

With the unemployment rate at 4.5%, the space for rapid cyclical growth above trend is limited. As noted above, there may be room to push labour force participation up higher, even as much as another percentage point, but beyond this is likely not a cyclical struggle and would more likely require policy that attacks the root causes of the decline in LFPR, especially at lower education levels. Some mildly expansionary fiscal policy – especially if it is directed at goals that increase long-run productivity as well – could be appropriate, but in a limited way. Over a longer horizon, GDP growth will be slower than the past, based on demographics, leaving any optimistic forecast dependent on very large increases in productivity.[7] Striving to lift productivity and living standards should be the goal of policymakers, but setting historically large gains as the expectation upon which to base fiscal policy would be a dangerous step.

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## About the author

**Jay Shambaugh** is a Professor of Economics and International Affairs at George Washington University. He was a Member of the White House Council of Economic Advisers from 2015-2017. Prior to joining the faculty at GW, Jay taught at Dartmouth and Georgetown and served as first Senior Economist for International Economics and then Chief Economist at the White House Council of Economic Advisers (2009-2011). He is also a Research Associate at the NBER and has been a visiting scholar at the IMF and the Institute for International Integration Studies at Trinity College Dublin. In addition to his book, *Exchange Rate Regimes in the Modern Era* (MIT Press, 2009), he has published in the *American Economic Review*, the *Quarterly Journal of Economics,* the *Review of Economics and Statistics,* the *Journal of International Economics,* and other leading journals. This research has been featured in the press including the *Economist* and the *Washington Post*, as well as on numerous economics blogs. He teaches courses on international and macroeconomics at the undergraduate, masters, and PhD levels.

# Part III

## International Policy Reform: Trade policy and trade agreements

# 13 Trade under T.R.U.M.P. policies

**Kyle Handley and Nuno Limão**
University of Michigan; University of Maryland and NBER[1]

International trade was a focal issue in the 2016 US Presidential election. Candidate Trump recognised the discontent of certain struggling US workers and amplified their view that international trade (and immigration) is the source of their problems. The president's trade agenda promises a new approach to trade policy that will 'expand trade in a way that is freer and fairer for all Americans.' We broadly support this general objective, especially if it means policies that expand trade and generate aggregate welfare gains, while ensuring those that bear major costs are compensated. Unfortunately, the current approach threatens to significantly *reduce* US trade, without specifying how it will fundamentally address redistribution.

We start by describing the administration's plans to address 'unfair foreign trade practices' via unilateral policies, renegotiation or withdrawal from agreements, and threats of import protection. We argue this overall approach of **T**emporary, **R**eversible, **U**ncertain **M**FN and **P**referential policies – **T.R.U.M.P.** policies – is generating a trade cold war that increases uncertainty and threatens the world trading system. We then draw on recent research that identifies how T.R.U.M.P. policies reduce trade related investments and quantifies the resulting contractions in exports and increases in consumer prices. We conclude by discussing how T.R.U.M.P. policies can be mitigated and some of the more disastrous outcomes avoided.

1 Kyle Handley acknowledges financial support from the NSF under grant SES-1360738. Nuno Limão acknowledges financial support from the NSF under grant SES-1360780.

## T.R.U.M.P. policies

Candidate Trump threatened to reverse commitments under long-standing trade agreements and substantially increase US import barriers. Specific threats included (1) withdrawing from the Trans Pacific Partnership (TPP); (2) renegotiating NAFTA 'to get a much better deal', or otherwise withdrawing; and (3) labelling China as a currency manipulator. More generally, he promised to 'identify every violation of trade agreements a foreign country is currently using to harm our workers (…) and use every tool under American and international law to end these abuses.' He also threatened to impose a 35% tariff on Mexican auto part imports and a 45% tariff on all Chinese imports, 'if they don't behave.' Moreover, he stated that if these policies were challenged in the WTO 'Then we're going to renegotiate or we're going to pull out (…) The World Trade Organization is a disaster.'

Some threats are Trump's version of the standard tough talk on trade employed by prior presidential candidates;[2] however, we should not dismiss them as electoral pandering. While specific threats may not be pursued by this administration, its overall approach can seriously damage the credibility of the world trading system for years. Two factors indicate this is a distinct possibility. First, there is a wave of populist and nationalist sentiment that blames many of the economic problems facing working and middle class labour on international trade and immigration. Second, the multiple threats during the campaign had a unifying principle: the 'system is rigged and the US must fight back'. This view is articulated in the campaign's economic plan that argues the US trade deficits are the outcome of 'unfair trade practices', where 'China is hardly the only cheater in the world; it's just the biggest'.[3]

2 Past presidential candidates have promised to: (1) withdraw from the TPP (Hillary Clinton); (2) renegotiate/amend Nafta (Hillary Clinton, Barack Obama) (3) label China a currency manipulator (Mitt Romney); (4) enforce rules in trade agreements and use 'tougher negotiators' (Barack Obama); (5) Revoke China's MFN status due to human rights violations, implying US tariffs of about 35% (Bill Clinton).

3 Senior advisors Peter Navarro and Ross Wilbur claim 'the use of illegal export subsidies, the theft of intellectual property, (…) currency manipulation, forced technology transfers and a widespread reliance upon both "sweat shop" labor and pollution havens', P. 16 Scoring the Trump Economic Plan: Trade, Regulatory, & Energy Policy Impacts.

While particular concerns may be valid and have been raised by other candidates, some of the remedies and methods proposed to address them are worrisome and generated considerable uncertainty even during the race. First, among foreign firms, 'about 50% of European CFOs say that a Trump win would cause them to hold off on investment until uncertainty about his presidency is resolved, compared to fewer than 10% if Clinton wins.' Second, a US news based index of Trade Policy Uncertainty (TPU) has substantially increased since Trump's candidacy announcement. As shown in Figure 1, the fraction of newspaper articles about international trade and trade policy that also mention 'uncertain' or 'uncertainty' continued to increase after Trump secured the nomination, and won the election and now stands at its highest level in a decade.[4]

The early signs of the willingness to pursue this approach include: **(1) The team.** The appointment of Wilbur Ross as Commerce Secretary and Peter Navarro as head of the newly created National Trade Council – the co-authors of the aforementioned economic plan. **(2) The agenda.** The "2017 Trade Policy Agenda" reflects the key issues in the campaign. It claims popular support for a new approach and promises that '(…) the guiding principle behind all of our actions in this key area will be to expand trade in a way that is freer and fairer for all Americans.' It warns that its '(…) goals can be best accomplished by focusing on bilateral negotiations rather than multilateral negotiations – and by renegotiating and revising trade agreements when our goals are not being met.' **(3) The actions.** These include the orders to (i) withdraw from TPP; (ii) identify countries with which the US had bilateral trade deficits along with their causes and consequences, including for national security, (iii) strengthen the enforcement of laws requiring the US government to favour American made products, and (iv) start the renegotiation process for NAFTA.

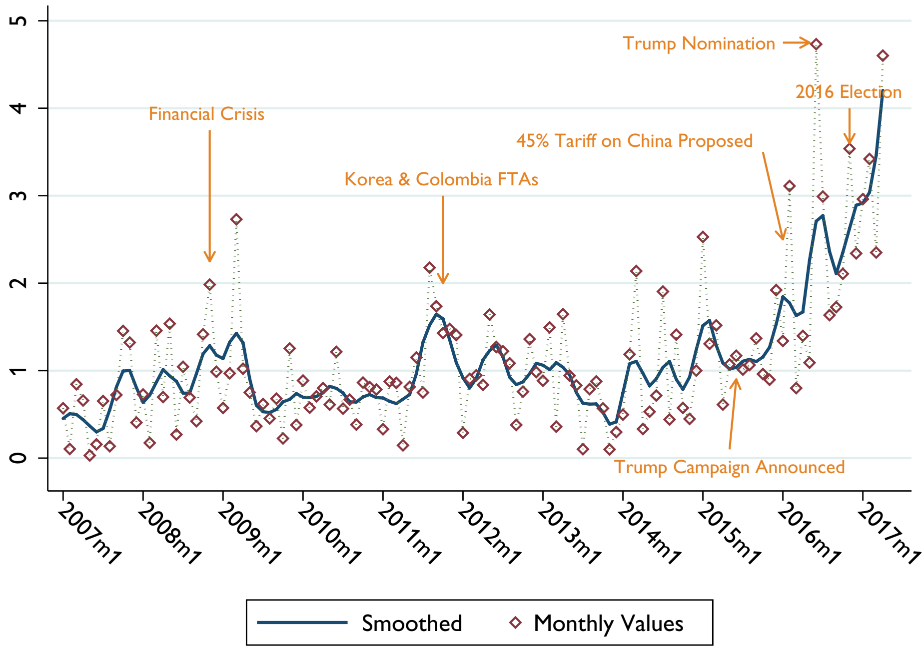
The probability of substantial executive trade policy changes depends on international and domestic legal constraints. Executive power is nearly unlimited when it comes to national security.[5]

4 The index applies the basic methodology in Baker *et al.* (2016) who, instead of trade policy, focus on domestic policy uncertainty and show it is associated with lower economic activity.

5 These include the "1917 Trading with the Enemy Act" and the "1977 International Emergency Economic Powers Act". The application under these Acts requires a war and/or emergency, and may thus be challenged in US courts. Those requirements are not necessary for the President to invoke the Trade Expansion Act of 1962 (art. 232) that allows restrictions on imports that affect national security. The GATT/WTO also allows for national security exceptions and no country has ever successfully challenged these.

Moreover, under the "1974 Trade Act" (section 122) the executive has the authority to impose temporary tariffs and quantitative restrictions to address balance-of-payments deficits. Thus, the prominent references to national security and deficits in the trade agenda and recent executive orders increase the likelihood that the administration could fend off domestic legal challenges to import protection; this further increases the current credibility of such threats.

**Figure 1.** US trade policy uncertainty news index, 2007-2017




International trade law also imposes constraints; but this administration appears willing to ignore them or renegotiate the agreements. The agenda lays out plans to enforce rules against foreign dumping and subsidies, in a way consistent with GATT/WTO rules, but also to use section 301 of the 1974 Trade act 'to take appropriate action in response to foreign actions that violate an international trade agreement or are unjustifiable, or unreasonable or discriminatory' (Agenda 2017 p.3). Section 301 has not been invoked since the creation of the WTO and would likely be challenged. This does not decrease the credibility of current threats if, as the trade agenda suggests (p.3), any negative WTO rulings are ignored.

In fact, in Congressional testimony on the costs and remedies open to the US after China's entry into the WTO, nominee for USTR, Robert Lighthizer, argued that the US should consider 'derogation from WTO stipulations if it is in its national interest' even if it leads to retaliation by other countries. Such derogation and retaliation in the context of broad issues such as the proposed border adjustment tax – that may generate the largest ever authorised retaliation (Bown 2017) – might lead to the demise of the WTO. In sum, there is a credible threat of an increase in US import protection either unilaterally, by renegotiating prior policies, or as a consequence of a trade war.

One of the stated objectives of PTAs is to 'ensure a predictable environment for business planning and investment'. That predictability is threatened by the real possibility that the US, like Britain, will terminate its agreements with one or more of 20 different countries. The president can withdraw from PTAs by simply providing a six-month written notice (cf. Art. 22 of NAFTA).

Even if NAFTA and other PTAs survive, their predictability will be severely undermined in the short- and long-run. First, there is little guidance on the parameters of renegotiation other than 'to get a better and fairer deal' for the United States. Outright withdrawal would eventually lead the US to re-impose MFN barriers on its former PTA partners.[6] US MFN tariffs are not high on average, but that does not mean withdrawing from the PTA would have small trade effects. These agreements also target a variety of barriers and reduce uncertainty substantially; both of which are important factors in explaining the large increase in bilateral trade caused by PTAs (Limão 2016). Second, the long-run prospects are also uncertain under one of the key objectives of the administration of: 'Updating current trade agreements as necessary to reflect changing times and market conditions' (Agenda, 2017 p.2). Such contingencies, for example linking policy changes to trade deficits, would make trade agreements more complex and uncertain as we discuss further below.

In addition to the general TPU increases reflected in the index in Figure 1, there is also specific evidence that the trade agenda changed investor expectations. A March 2017 CNBC survey found that 95% of global CFOs are concerned that the new administration will provoke a trade war with China and about 17.5% consider US trade policy to be the 'biggest external risk factor' facing their business, a risk second only to consumer demand.

6 The President may require additional authority from Congress to revert to those policy levels.

A majority of US CFOs surveyed in this period by Duke University also believe that specific policies such as a 'substantial tariff on Chinese and Mexican goods' would be bad for the US economy.[7] In sum, both the reactions of business leaders and of the media strongly suggest TPU has increased, which we now show can have economic consequences even before any policies are implemented.

## Economic consequences of T.R.U.M.P. policies

Recent research shows the large potential costs related to trade under T.R.U.M.P. policies. Our focus is not on the impacts under a hypothetical trade war, but rather those under the ongoing trade cold war initiated by Trump, which is characterised by a higher *probability* of abandoning/renegotiating agreements and entering a 'hot' trade war.[8]

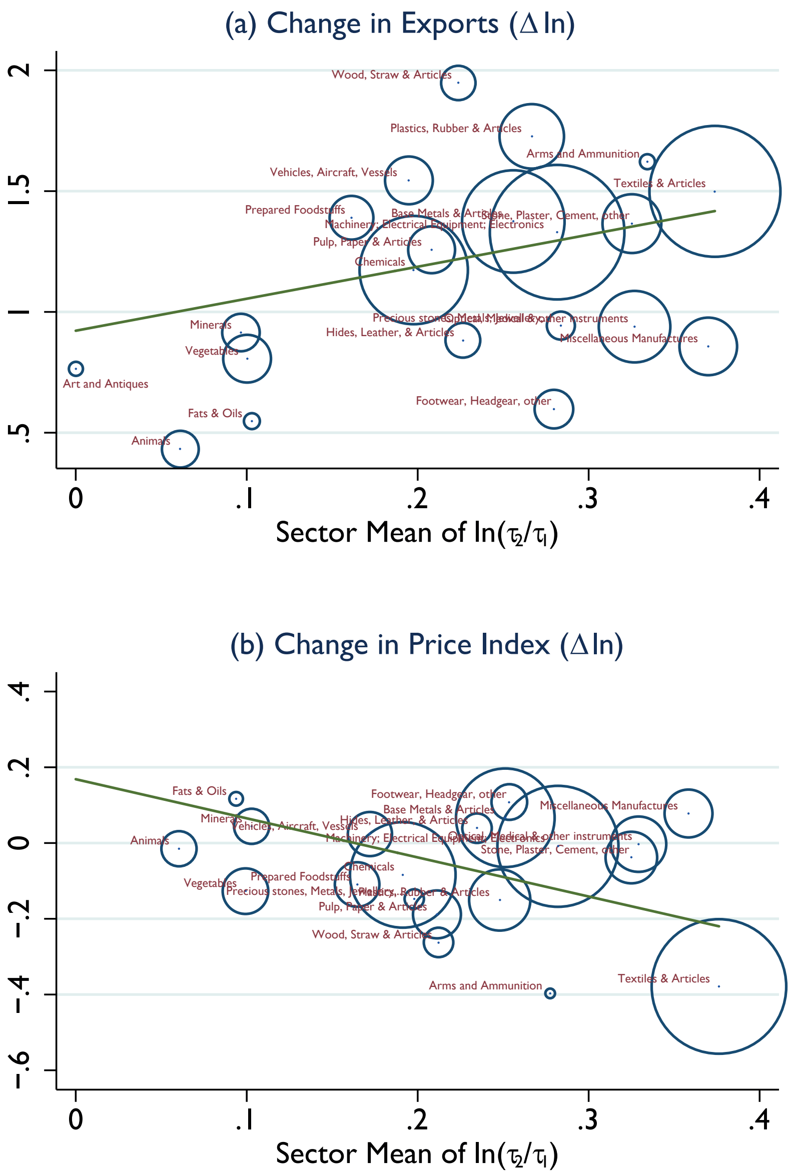
### Trade cold war: US policy uncertainty, imports and consumer welfare

In the 1990's the US congress voted annually on whether to revoke China's MFN status and thus impose tariffs of over 30%. The current trade cold war shares a key feature with that period: threatening substantial tariffs if China does not behave. Handley and Limão (forthcoming) find the earlier cold war substantially reduced imports and increased consumer prices of US imports from China. They estimate the differential impacts across industries of eliminating that threat after China's 2001 WTO accession. The basic relationship is clear in their figure 2 (below). It shows that industries facing higher potential tariff increases in the US in 2000 (x-axis) had substantially larger import growth and price reductions. After controlling for other factors, they conclude that the uncertainty reduction accounted for about a third of the import growth and lowered their price for the US consumer by over 15% in 2000-2005.

7 These concerns are shared at similar rates by the subset of CFOS of US manufacturing firms, which calls into question the administration's belief that these policies would help them.

8 Noland *et al*. (2016) find large impacts on the US economy if it ever started a trade war, defined as a substantial increase in US tariffs and possibly foreign retaliation.

**Figure 2.** Chinese export and price index change vs. initial uncertainty level.




*Notes*: Reproduced from Handley and Limão (Forthcoming, Fig. 2). Simple means within sector of export and price index change vs means of initial uncertainty measured by ln(τ2V /τ1V ) where τ2V is the column 2 threat tariff, i.e. Smoot-Hawley era, and τ1V is the MFN tariff in 2000. Circles are proportional to the number of observations used as weights in the linear fit represented.

Thus, even though the probability of escalation during the trade cold war of the 1990s was low, the economic effects from the threat of war were large; the effective price increases for US consumers were equivalent to a permanent 13 percentage point tariff increase. Re-kindling those threats in 2017 will have even larger costs for US consumers as the share of Chinese goods' consumption is higher.[9]

The current administration's threat to renegotiate and willingness to withdraw from *all* its agreements will be even costlier to US consumers. Consider a simple experiment: a modest US increase in the probability of high protection, similar to that which China faced but against all its partners. Handley and Limão (Forthcoming) compare the welfare cost to US consumers of this TPU and show it is about one third of the cost they would face if the US closed its borders to all trade.

### Trade cold war: Reciprocal policy uncertainty and US exports

The proposed approach to PTAs is also likely to reduce US gains from these agreements and lower its exports. Renegotiating PTAs risks turning them into temporary reversible preferences, similar, for example, to those the US once granted to Peru and Colombia. These uncertain preferences fail to generate substantial trade (cf. Limão, 2016) and export entry investments (Handley and Limão 2015), which is a key reason why Peru and Colombia sought permanent PTAs with the US in exchange for lowered barriers to US exporters. Even if 'tough US negotiators' got a 'fairer share' of the overall gains from PTAs those gains would be lower and US exporters' market access would be likely to be reduced under new or renegotiated temporary PTAs.

The insurance value of PTAs and the cost to US exporters of foreign uncertainty can be particularly important during periods of economic crisis. Downturns tend to increase import protection (Bown and Crowley 2013) – the starkest example was the Great Depression, which triggered a trade war in the 1930s. The Great Recession and associated global trade collapse increased TPU, as seen in Figure 1, and the risk of a trade war.

9 The higher prices would increase the supply and employment of non-Chinese firms to the US market, but many of those firms in 2017 will no longer be in the US, so there is limited potential for this new trade cold war against China to restore many of the manufacturing jobs lost when TPU was reduced in 2001.

Fortunately, history did not repeat itself. An important difference relative to the Depression was the large network of credible trade agreements. These include PTAs and the GATT/WTO, which was created in 1948, following a period of high TPU, in part to avoid repeating the 1930s (Limão and Maggi 2015). Under T.R.U.M.P. policies and in the wake of Brexit there is a higher probability that a large economic crisis will trigger a trade war.

Carballo *et al.* (2015) show that PTAs provided US exporters with some insurance during the great recession. They find substantial exit of US exporting firms from non-PTA markets where economic uncertainty was higher; moreover, that effect was magnified in industries where the threat of tariff protection was also higher and substantially smaller in PTA markets.

Reopening any agreement would replace a system built on long term policy commitments with a regime where commitments change with the preferences of each newly elected government. The latter would ensure an *unpredictable* environment for business and investment and end US reciprocal PTAs as we know them. Renegotiating PTAs to include snap renegotiation triggers for deviations from trade deficit targets and 30-day termination rules, would explicitly increase interactions between policy and adverse economic shocks and lower their insurance value. Moreover, if the administration carries out threats to ignore adverse WTO rulings or withdraw, then US exporters may expect to face tariffs much higher than the current bound rate commitments, which have been shown to effectively increase exports (cf. Handley 2014). In short, US trading partners will reciprocate T.R.U.M.P. policies and their policy uncertainty will hamper the administrations' key objective of expanding US exports and associated employment.

## Mitigating T.R.U.M.P. policies

Some of the consequences of T.R.U.M.P. policies may already be under way. However, their full effects, if left unchecked, will take a few years, as firms allow their investments in exporting to depreciate. This slow process may mask the cost of the policies (unless there is a trade war or economic crisis) but also opens up the possibility that they can be mitigated. We conclude with suggestions on how the administration, Congress and other agents could achieve this and move closer to the objective of 'freer and fairer trade'.

The administration could lower uncertainty in the following ways. First, it should recognise the historical value of the current trading system and indicate a willingness to abide by the basic principles of cooperation and reciprocity. Enforcing and renegotiating specific aspects of these agreements will be more successful if other countries believe the US will abide by them instead of labelling them as 'a disaster' and their members as 'cheaters'. Second, it should announce which PTAs and clauses will be renegotiated; recognise much of their value stems from reducing policy uncertainty; and abandon proposals of 30-day termination periods and bilateral deficits induced renegotiations.

The US congress can also mitigate the impact of T.R.U.M.P. policies. The Constitution gives Congress the power 'to regulate commerce with foreign nations' (Art. I). While some of that power has been delegated to the executive (cf. Hufbauer 2016), Congress can vow to reclaim it if the executive uses it in a wholly new context or abuses it. For example, exiting PTAs rather than entering them or invoking the "1917 Trading with the Enemy Act" or the "1977 International Emergency Economic Powers Act" in the absence of a real war or emergency.[10] Large unilateral policies such as the border adjustment tax can trigger a trade war in the current environment and Congress should seek to avoid such an outcome (cf. Bown 2017).[11]

Other governments also have an important role to play. First, to re-commit to existing agreements between themselves. Second, to resist 'new and better' deals with the US, if they amount to temporary preferences conditional on arbitrary requirements. Third, to recognise that there are legitimate concerns with current agreements that need to be addressed, which include the secrecy of negotiations and the disproportionate influence of corporations over them

10 Those requirements are not necessary for the President to invoke the trade expansion Act of 1962 (art. 232) that allows restrictions on imports that affect national security.

11 US firms, workers and consumers (perhaps represented by states) can also vow to oppose any future extreme unilateral measures through preliminary court injunctions if they were ever ordered — the travel ban provides a recent precedent.

If the US administration is truly motivated to improve the outcomes of trade agreements for US workers then it should expand its trade agenda. First, by clarifying how workers will be represented in future negotiations. Second, by recognising that trade, like technological change, will always generate some losers and that the best way to address this is via a comprehensive social safety net, expanded access to education and job retraining, and incentives to increase geographic mobility.

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## About the authors

**Kyle Handley** is Assistant Professor of Business Economics and Public Policy at the University of Michigan in the Ross School of Business. He has previously worked at Stanford University and the U.S. Census Bureau. His work focuses on international trade, policy uncertainty, and firm dynamics. He was the 2011 recipient of the WTO Young Trade Economist Essay Award. He received his B.S. in economics and math from the University of Wisconsin, his M.Sc. in economics from the London School of Economics, and his Ph.D. in economics from the University of Maryland.

**Nuno Limão**'s research focuses on international trade, trade policy, and political economy. His research integrates theoretical and empirical work to examine a variety of issues, such as how governments choose among redistribution policies, the determinants of trade policy and trade agreements, and the effects of trade costs and geographic location. Professor Limão's current research examines how firms and consumers are affected by policy uncertainty and the role for international institutions in managing such uncertainty. Professor Limão is a research associate of the National Bureau of Economic Research and the Kiel Institute for the World Economy and an Associate Editor of the Journal of International Economics. He received his BSc in economics from the London School of Economics in 1996 and his PhD from Columbia University in 2001.

# 14 Multilateral or bilateral trade deals? Lessons from history

**Chad P. Bown, Robert W. Staiger and Alan O. Sykes**
Peterson Institute for International Economics and CEPR; Dartmouth College and NBER; Stanford Law School[1]

> *The Trump Administration believes in free and fair trade, and we are looking forward to developing deeper trading relationships with international partners who share that belief. But, going forward, we will tend to focus on bilateral negotiations. (USTR, 2017)*
>
> *The United States must address the challenges to economic growth and employment that may arise from large and chronic trade deficits and the unfair and discriminatory trade practices of some of our trading partners. (White House, 2017)*

President Donald Trump has railed against trade deals, and especially multi-country trade agreements.[2] His stated intent is for his administration to focus on bilateralism and bilateral trade imbalances.

This approach does raise questions about trade agreement design. Why negotiate trade agreements multilaterally as opposed to bilaterally? What are the benefits of an approach that features the most-favoured-nation (MFN) rule of nondiscrimination instead of bilateral trade preferences?

1 Thanks to Douglas Irwin for useful discussions. All remaining errors are our own.

2 In a televised interview with NBC's Chuck Todd, Trump indicated "It doesn't matter. Then we're going to renegotiate or we're going to pull out. These trade deals are a disaster, Chuck. World Trade Organization is a disaster." (NBC, 2016)

Many themes in Trump's stated approach are not new; they resonate with US trade policy debates of the 1930s. The parallels are instructive for understanding the economic logic behind the current trading system and how lessons from historical experience have shaped it.

## The economic environment and the trading system of the early 1930s

The First World War of 1914-1918 left a devastated global economy. Recovery began to take hold in the 1920s, but the US stock market crash of 1929 was a major setback, and the world ultimately fell into the Great Depression. The United States made matters worse in 1930 by responding to the economic crisis with its now infamous Smoot-Hawley tariffs.

Some countries – like Canada, Spain, Italy and Switzerland – retaliated directly by raising tariffs or imposing quantitative restrictions against US exports. Other partners – like the United Kingdom – retaliated indirectly by reducing trade barriers on a selective, discriminatory basis to favoured trading partners. The UK's imperial preferences deepened trade blocs from which the United States was excluded.[3]

US exporters faced discrimination in foreign markets through a complex web of policies. As it was described later, world trade in the 1930s was

> *regulated by quotas, exchange controls, clearing agreements and barter deals, which relegated the customs tariff, the normal instrument of trade control, to a minor role. It became evident during the [Second World War] that the restrictions on trade would grow even more onerous unless a resolute attempt were made to restore to Europe and the world a one market economy. (GATT 1949, p. 6)*

3 For discussions, see Irwin *et al*. (2008, pp. 5-8) and Irwin (2012, pp. 13-34).

## The 1934 Reciprocal Trade Agreements Act

By 1934, President Roosevelt and Congress had developed a new approach to US trade policy through the Reciprocal Trade Agreements Act (RTAA). Cutting US tariffs would be undertaken by negotiating reductions in trade barriers abroad, in order to achieve reciprocal *changes* in market access. This idea of reciprocity marked a major shift in US trade policy, away from the unilateralism of earlier periods and toward the negotiation of tariff agreements that would entail symmetric obligations for the partner countries. Jagdish Bhagwati characterised what this symmetry did – and, importantly, what it *did not* – imply as

> …first-difference reciprocity – *that is, tariff cuts are to proceed via bargaining that reflects a balance of perceived advantages at the margin rather than via negotiations that result in a perceived full equality of market access and reverse market access (or what, in modern American parlance, is pithily described as a 'level playing field'). (Bhagwati 1988, p. 36)*

Equally important was the decision the Roosevelt administration would make to afford nondiscriminatory treatment through an 'unconditional MFN clause'. This clause would assure partners that any tariff cuts that the United States agreed to in later negotiations with other countries would be automatically extended back to them as well. And under reciprocity, the United States would demand the same unconditional MFN treatment from its bargaining partners.

This important decision followed a battle over who would lead US trade policy negotiations under the RTAA. The struggle arose between Secretary of State Cordell Hull and George N. Peek, a special assistant to the President on trade policy.[4]

4 See the discussion in Tasca (1938, pp. 86-90). Peek's position was also supported by Secretary of Agriculture H. A. Wallace, and is similar to views articulated by the Bannon, Navarro, Ross, and Lighthizer camp in the Trump administration (Donnan and Sevastopulo 2017).

Peek's positions on bilateral negotiations and bilateral trade imbalances echo those taken by some Trump administration officials today:

> *[Peek] was an adherent of high tariffs in line with the historical American tariff policy. With this as the starting point he then advanced a program of trade bargaining on a strictly substantively bilateral basis with pure barter deals a vital part. Implied here was the abandonment of the unconditional [MFN] clause in American commercial treaties. (Tasca 1938, p. 90)*

But Cordell Hull eventually won the administration's internal clash for control over Roosevelt's trade diplomacy in the 1930s. Hull was a strong advocate for unconditional MFN in US negotiations.[5] He was particularly concerned about the impact of imperial preferences, where tariffs had been selectively reduced in important US export markets – like the United Kingdom and Canada – but where US companies and farmers faced decimation because they were left out. The United States pursued unconditional MFN to put an end to the discrimination facing US exporters in the 1930s.

## Pre-1934 experience with bilateral negotiations coupled with 'conditional' MFN

The history of trade agreements that had attempted to proceed without unconditional MFN also showcases its virtues.[6] Under the alternative 'conditional' MFN approach, a country does not automatically extend newly negotiated tariff cuts to partners with which it has negotiated a prior deal. The idea is that a new, lower tariff would be extended to earlier partners only if they offer satisfactory additional trade concessions in exchange.

5 To be clear, the United States had shifted toward the unconditional MFN approach by 1923 - William Culbertson of the Tariff Commission was the main instigator. Hull's contribution in the 1930s was to implement unconditional MFN in reciprocal tariff negotiations.

6 See Bagwell and Staiger (2010a) for a more detailed discussion of these issues. Formal models that showcase these issues include Bagwell and Staiger (2005, 2010b).

While this may sound reasonable, the European experience with trade agreements omitting unconditional MFN had proven unsustainable. As Wallace (1933, p. 629) notes:

> *After the [First] World War, France experimented with the idea of abandoning the [unconditional] most-favored-nation clause…By 1927 France was again driven back to the granting of most-favored-nation treatment, either de jure or de facto… When a country, by exclusive tariff bargains, institutes discriminations against third countries, then the greater these discriminations the greater will be the pressure against that country for their removal. In each successive negotiation it finds that the firmest demand of the other country is for equality of treatment, present and future, guarded by a most-favored-nation clause or its equivalent.*

Because of the fear that future deals with others would result in the erosion of concessions offered in the current deal, negotiations relying on conditional MFN were less likely to come to any deal whatsoever, and thus ended up a waste of time. Tasca (1938, p. 105) reports that of the 625 trade agreements negotiated globally between 1870 and 1934, only 48 had a conditional MFN clause. And in many of those, unconditional MFN became the *de facto* practice.

Nevertheless, understanding the full benefits of MFN is complicated. As Wallace (1933, p. 629) described – like today – 1930s critics of unconditional MFN too often also focused on just one side of the ledger:

> *One of the reasons why the most-favored-nation clause has been under fire in Europe is that manufacturers have tabulated the reductions of duty incidentally extended to third countries, but exporting interests have not been equally diligent in calling attention to the reductions in foreign tariffs to which their exports have become incidentally entitled in the same manner.*

## The US experience since the RTAA

Between 1934 and 1947, the United States negotiated 29 separate bilateral agreements to conclusion under the RTAA, and in each it implemented the unconditional MFN rule. In 1947, this approach was consolidated into a multilateral framework as the General Agreement on Tariffs and Trade (GATT). The multilateral GATT system was transformed into the World Trade Organization (WTO) in 1995.

The United States abandoned pursuit of bilateral deals until the mid-1980s. It signed its first bilateral free trade agreement (FTA) in 1985 with Israel, followed by the US-Canada FTA in 1987, adding Mexico to form the North American Free Trade Agreement (NAFTA) in 1994. It has negotiated additional FTAs since 2000, and now has such agreements with 20 (mostly small) countries.

Under WTO rules, permissible FTAs must essentially eliminate tariffs on trade among the partners. For this reason, countries do not need to worry that some other partner will later receive a better *tariff* deal, because tariffs are already set at their minimum value (zero). Owing to WTO rules, these discriminatory arrangements are thus quite distinct from the chequered history of partial liberalisation arrangements in Europe and elsewhere before 1934.

Still, there are plenty of other ways for 'better' future FTA deals to erode the preferential concessions offered in a current deal in the modern global economy. Examples include offering additional preferential access through non-tariff concessions in areas such as services trade, or intellectual property and investor-rights protections.

In any event, because most US FTA partners are small, most US trade is still conducted under WTO rules and is thus subject to unconditional MFN. As a result, most of the exports of US companies and farmers are protected only by the trading partners' commitment to MFN that the WTO system provides.

## Implications for today

History indicates that a bilateral approach to trade liberalisation does not work well. President Trump's potential shift toward bilateral and discriminatory negotiations would run into many of the same bargaining problems that negotiators ran into before 1934.

Modern trading partners may learn to be hesitant to conclude bargains with the United States without an unconditional-MFN type guarantee extended to include non-tariff concessions, due to fears that Trump's future deals with others would erode the value of their concessions. Moreover, without an analogous unconditional-MFN type guarantee from the other side, there would be nothing to prevent US FTA partners from offering better future deals to *other* countries.

President Trump seems motivated to negotiate bilateral deals in part out of the belief that his form of one-on-one bargaining will be more effective in getting better terms for the United States. But, looking at trade deals as a zero-sum game where 'their win is our loss' – rather than as a win-win where the benefits of a good agreement are shared mutually – does not lead to better trade deals, for a number of reasons.

First, when it comes to trade negotiations, countries are savvy to the bluff and bluster that might prove effective in other kinds of deal-making. Their positions are not easily swayed: European countries tried such techniques in the 1930s, as countries jacked up their tariffs on the eve of bargaining, in an attempt to influence the subsequent negotiations. Their negotiating partners quickly saw through these 'bargaining tariffs'; as a result, explicit rules designed to prevent the use of bargaining tariffs were introduced into both the RTAA and the GATT/WTO.

And second, as there is no international 'police force' that can compel countries to follow the rules of any trade agreement, all countries must have a stake in the deal. Trade agreements are only successful if it is in countries' mutual interest to obey the rules. So, even if – through bluff and bluster – the United States were successful in negotiating 'the best deal' for itself and left its partners with little in return, the United States would face major headaches down the road in trying to enforce the agreement's rules.

Another of President Trump's motivations for pursuing bilateral trade bargains appears to be to target trading partners with which the United States has large bilateral trade deficits, and to negotiate 'more reciprocal' tariff levels with these partners to address these imbalances. But this thinking is also misguided on two counts.

First, the reciprocity successfully embedded in the multilateral trading system is, again, a 'first-difference' form of reciprocity. It does not imply uniform reciprocal tariff rates – that if the United States has a 2.5% tariff for cars, then China should have a 2.5% tariff for cars – across countries.

Second, addressing trade imbalances through trade agreements makes little economic sense. Multilateral trade imbalances reflect differences between national levels of savings and investment that have little to do with tariffs and trade policy. And *bilateral* trade imbalances reflect comparative advantage and patterns of trade which, if blocked, would prevent the United States from enjoying these benefits.

Nevertheless, the United States and the global trading system do face challenges.

Does the WTO face a serious 'latecomer's problem' in that, owing to their relatively recent entry into the global economy, major emerging markets like Brazil, India and China apply much higher tariffs to US exports than the United States imposes? The key to resolving that issue may be less about how to 'level the playing field', than, instead, how to re-harness use of 'first-difference reciprocity' of the sort that resulted in the remarkable trade liberalisation of industrialised countries beginning under the GATT and then WTO.

Furthermore, how does the system integrate a large non-market economy like China into a multilateral system and rules that are built on market principles?[7]

There may be need for a new deal on trade to address these and other challenges. But the problems solved by the US commitment to unconditional MFN and first difference reciprocity in the 1930s and 1940s also exist today. There is no reason to believe that a bilateral and discriminatory approach would be effective in meeting current challenges. And with pre-1934 history as a guide, such an approach could unravel many of the achieved gains.

7 On a discussion of China and its evolution toward a market economy, see Bown (2016) and Wu (2016).

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## About the authors

**Chad P. Bown** is Senior Fellow at the Peterson Institute for International Economics in Washington and a Research Fellow at CEPR in London. Bown has served as Senior Economist in the White House on the President's Council of Economic Advisers, and he is formerly a tenured Professor of Economics at Brandeis University. Bown spent a year in residence at the WTO Secretariat in Geneva, and he was most recently a Lead Economist at the World Bank. In 2004, Bown initiated a trade policy transparency project that resulted in the Global Antidumping Database, which he managed through 2016 as part of the World Bank's Temporary Trade Barriers Database. He currently co-directs an annual program of scholars providing legal-economic assessments of WTO case law published with Cambridge University Press. His books include *The Great Recession and Import Protection* (CEPR and World Bank, 2011), *Self-Enforcing Trade: Developing Countries and WTO Dispute Settlement* (Brookings Institution Press, 2009) and *The Law, Economics and Politics of Retaliation in WTO Dispute Settlement* (co-edited with Joost Pauwelyn, Cambridge University Press, 2010). Follow him on Twitter @ChadBown.

**Robert W. Staiger** is the Roth Family Distinguished Professor in the Arts and Sciences, and Professor of Economics, at Dartmouth College. Staiger's research focuses on international trade policy rules and institutions. His research has been published in numerous academic journals, and in a book, *The Economics of the World Trading System*. Staiger has served as Editor (along with Charles Engel) of the *Journal of International Economics* since 2010, and served as Editor (along with Kyle Bagwell) of *The Handbook of Commercial Policy*, published by Elsevier in 2016. He received his A.B. from Williams College and his Ph.D. from Michigan.

He was a Reporter for the American Law Institute in its study of *Principles of Trade Law: The World Trade Organization (2002-12)*, and has served on the selection panel for the WTO's Award for Young Economists since 2009. He is also a Fellow of the Econometric Society (2008).

**Alan O. Sykes**, PhD, Yale University; JD, Yale University Law School, is Professor of Law, Stanford Law School and Senior Fellow, Stanford Institute for Economic Policy Research. Leading expert on the application of economics to legal problems, with a focus on international economic relations. Writing and teaching have encompassed international trade, international investment, torts, contracts, insurance, antitrust, and economic analysis of law. Editorial Board, *Journal of International Economic Law*; Member of the board of editors, *World Trade Review*; Editorial Board, *American Journal of International Law*. Formerly: Editor, *Journal of Legal Studies* and the *Journal of Law and Economics*; Robert A. Kindler Professor of Law, New York University (NYU) Law School; Frank and Bernice J. Greenberg Professor of Law, University of Chicago Law School.

# 15 What the United States stands to lose in Asia

**Katheryn N. Russ**
University of California, Davis and NBER

*What we want is fair trade… And we're gonna treat countries fairly, but they have to treat us fairly.*

*President Donald J. Trump*[1]

*My concern is that we consign this region to China… And that, to me, is not good for the United States of America.*

*Senator John McCain*[2]

Automation and other broader shifts in the US economy raise tough questions about how to best ensure job security and enhance business dynamism. It can be tempting, politically, to cast blame on bilateral trade deficits – especially with some countries in the Asia-Pacific – and shrink back into the protectionism of the 1930s, using these partners as a scapegoat. The truth is the United States can't afford to.

The Asia-Pacific region generates 40% of global economic growth. It contains four of the United States' top 10 trading partners and five of its treaty allies. Almost one-third of US trade takes place with countries in the Pacific Rim.

1 See Ylan Q. Mui, "President Trump Signs Order to Withdraw from Trans-Pacific Partnership", The Washington Post, 23 January 2017.

2 See Louis Nelson, "McCain: Without Trade Pact, China Will Be Economically Dominant", Politico, 24 January 2017.

By 2030, Asia will be home to an estimated 3.2 billion middle class consumers, an enormous potential market for US firms. With tensions growing over territorial disputes, renewed threats of nuclear war by North Korea, and a quickly fading window of opportunity to entrench US ideals of free and fair commerce, having a strong US presence in the region has never been more critical both to economic prosperity and for ensuring global stability.

How does one ensure that markets in Asia are open and that trade rules give a fair shake to both US firms and workers? One approach is to agree on strong, baseline worker protections for all countries to uphold, to increase market access with particular attention to small- and medium-sized businesses and farms, and to tackle unfair promotion of state-owned or state-supported enterprises. The other is to invest heavily in education and infrastructure to equip our workers with the resources they need to thrive in a high-tech economy. Trade agreements that establish these rules – and that make these provisions enforceable – combined with domestic policy that invests in workers are an important tool for long-term American commercial interests in the region and can support and protect good-paying jobs at home.

The United States has been a Pacific Rim power for more than 70 years. The trade agreements that it has championed – including the GATT and WTO – have established the foundation for much of the economic growth taking place in the region since World War II. The Trump Administration now faces a potentially important historic turning point, as it contemplates the future US role in Asia.

## Why trade agreements with Asia matter for US workers

*Empowering workers.* One way to ensure that businesses operating in countries like Malaysia, Vietnam, and elsewhere do not engage in a race-to-the-bottom in wages and worker safety is to build basic employee rights into the text of trade agreements and to make them enforceable. Violations then become subject to international adjudication, and the United States can be authorised to impose tariffs on exports until they are rectified. Importantly, these countries are increasingly committed to taking on US values – the right to collective bargaining through independent unions; clearly legislated rights to a safe and healthy work environment;

a fair minimum wage; and prohibitions on child labour, forced labour, and human trafficking. The key has been constructive engagement achieved by negotiating trade agreements.

*'Hollowing out'*. Does Asia itself present a threat to US workers due to lower wages in developing countries within the region? In fact, real value-added in the US manufacturing sector is virtually higher than it has ever been, but the invention of new technologies means that companies increasingly produce more with fewer workers. Pressure on middle-class wages is a widespread phenomenon, even outside the United States, and likely related to the transformation of jobs through technology and automation. This is a challenge that the United States could do much more to meet, through arming its workers with appropriate skills and other resources.

There is currently a substantial skills mismatch between what is demanded by employers and what is supplied in the US workforce;[3] a decaying infrastructure, making it harder for workers to travel to their jobs or to find new ways to get to work if they switch jobs; high-cost and often low-quality childcare, that makes it difficult for many families with young children to participate fully in the labour force; and a declining rate of entrepreneurship, leading to fewer opportunities for workers to switch jobs and more market power for employers over their employees.

Each of these factors may put US workers at a disadvantage when faced with the introduction of new technologies in the workplace, but disengaging from global markets does little to address any of the challenges.

Impeding trade with Asia would put US workers at a disadvantage in several ways. First, it makes production inputs more expensive for US firms competing in the global market for goods and services. Second, failing to advance trade agreements in this rapidly growing region makes it harder for US firms to sell there, dampening the incentive that larger markets provide for private-sector investment in innovation that leads to high-paying jobs. This is important, as exporters pay 12-20% higher wages (Riker 2015), on average, than non-exporting firms, especially for blue-collar workers.

3 See Gee (2017) for one illustration.

Third, if the United States does not advance the rules of trade for the region, other countries will. That would put 3.4 million US jobs supported by exports to the Asia-Pacific at risk (Rasmussen and Xu 2016), and possibly many more due to the broader effects on the industries where they work.

## Why trade agreements with Asia matter for US firms and farms

*US exporters face trade barriers in Asia.* Although it is one of the fastest growing markets in the world, Asian countries often maintain trade barriers affecting US commercial interests seeking access to these markets. They often have much higher average tariffs than the United States, or low nominal tariffs but high non-tariff barriers that effectively keep out products ranging from US autos to agriculture, as well as the increasingly important US services trade.

Trade agreements are most likely the only way to remedy potential pre-existing discrimination against US export interests in the region. A web of free trade areas and other special treatment in place throughout East Asia already gives China and many others favourable treatment relative to US goods and services. Japan is a useful example of a lucrative market where US firms are at a disadvantage relative to other Pacific trading partners.

*Multilateralism may not be dispensable.* Japan currently offers China special tariff access as a developing country under a lower Generalised System of Preferences (GSP) tariff schedule. Japan also has a free trade agreement with many other countries in the region through the Association of Southeast Asian Nations (ASEAN). Japan has been engaged in the China-led Regional Comprehensive Economic Partnership (RCEP) negotiations, which is still evolving but has often been called the 'ASEAN + 6'; it could result in Japan further extending the special preferences it affords ASEAN nations to China and several other countries. This would present additional challenges for US exports to Japan in industries where the American companies compete with firms from China or other RCEP countries.

In Japan alone, one study finds that exports from 78 US goods industries – accounting for 12 million jobs and 360,000 business establishments in the United States (Council of Economic Advisers 2016) – would be at risk if the China-led RCEP proceeded without a US free trade agreement with Japan. Vice President Pence's visit in April emphasised the importance of US economic ties to Japan and suggested hope for a bilateral trade agreement during the Trump Administration.

However, Japan is now stressing the importance of a multilateral approach in the region, both for efficiency's sake and regional security. Japanese officials have raised the possibility of inviting the United Kingdom to take part in negotiations for the Trans-Pacific Partnership (TPP), a high-standard trade agreement from which President Trump withdrew shortly after taking office. They also have hinted recently that Japan could not provide such favourable terms in a bilateral agreement with the United States as were negotiated in the multi-country TPP, particularly in agriculture (Nikkei Asian Review 2017). A multilateral approach would also make it much cheaper for US firms to deal with rules-of-origin, which bilateral agreements make complex in practice, no matter how carefully the rules are designed.

Further, 'renegotiating' the Korea-US Free Trade Agreement, KORUS, could significantly impair the US ability to close any new bilateral agreement in the region. Although the United States' bilateral trade deficit with South Korea has grown since KORUS went into effect in 2012, this is largely due to differences in growth trajectories. The US International Trade Commission estimates that without KORUS in effect, the US bilateral trade deficit with South Korea would be nearly $16 billion *larger* than it has been with the agreement in place (US International Trade Commission 2016).

*Services.* The United States has an overall trade surplus in services, a sector which provides 80% of all American jobs. Yet, trade in services is barely covered by most existing trade agreements; this certainly applies to US services exports to the most rapidly growing foreign markets. US trade negotiators could aim to make digital flows of products duty free, prevent forced transfer of technologies or data localisation requirements that foreign governments sometimes use to appropriate private-sector technologies or make it harder to penetrate the domestic market, require trading partners to allow data encryption to ensure privacy for trade secrets and consumer transactions, and generally promote e-commerce.

*SMEs.* Many consider trade to be primarily the domain of very large firms. While it is true that large firms account for a big fraction of US exports, 98% of US exporters and 97% of US importers are small- and medium-sized enterprises (US Bureau of the Census 2015). To focus solely on large firms and aggregate flows is a mistake. The opportunity to participate in export markets and easy access to imported inputs may boost investment and innovation among the most productive SMEs (Bøler *et al.* 2015 and Eliasson *et al*. 2012), helping to spread the benefits of trade more widely and increase productivity growth. Most exporters serve only one foreign market because it can be costly to figure out the rules in a new marketplace, especially one with a different language. A multilateral trade agreement in the region could standardise the rules of economic engagement across a large number of markets and ensure that they are published online in English. This would make it easier for smaller firms to export to multiple markets since they need learn only one set of rules to access all participating countries. An agreement that shortens customs and port delays and promotes other means of trade facilitation, as well as special treatment for express deliveries, could also make it easier for smaller firms to ship their goods to buyers in Asia, helping to ensure that the benefits of trade are widely spread across US firms of all sizes.

## Tackling the latecomer's problem, as well as new concerns arising due to China's integration

Advanced economies have been lowering tariffs on manufactured goods since the 1950s, and thus they may have little left to offer as leverage to entice the newer participants in negotiations to lower their tariffs – an issue referred to as the 'latecomer's problem' (Bagwell and Staiger 2014). Furthermore, there are important questions involving how to convince emerging economies especially to give up state production subsidies and other support, as they become bigger participants – and yet retain non-market economy characteristics – in the rules-based trading system.[4]

Given increasing economic and geopolitical interdependence with countries like China, it is sometimes impossible in bilateral negotiations to tackle problems like overcapacity in steel, aluminium, or other industries that are long-time beneficiaries of state support.

4 For a discussion of the issue of China's non-market economy characteristics, see Bown (2016).

The United States continues to grow, but, as other countries have overcome their post-WWII challenges, the United States is now only one-fifth of the global economy. It is possible that US trade barriers could be implemented to keep imported steel and aluminium out of the American market. Yet these barriers simultaneously put US industries who use these inputs at a great disadvantage by increasing their costs of production relative to rivals elsewhere – industries with millions of jobs.

These problems affect the global marketplace and require comprehensive action through multilateral negotiations. The OECD's Global Steel Forum is an example of such multilateral action being helpful when progress in other venues have stalled. The aluminium industry has recently requested another such Forum for aluminium. Some argue that the WTO is also flexible enough to be a vehicle to tackle the latecomer's problem, if it could get beyond the Doha Round stalemate and be freed up to tackle a new, 21st century negotiating agenda.

Regional and multilateral trade negotiations can provide the United States and other countries with more leverage than they would have in bilateral settings to establish the appropriate behaviour for state-owned enterprises, put them under the jurisdiction of the same laws that govern other firms, and make sure they act according to market principles. Eleven trading partners in the Pacific Rim have already agreed to these sorts of principles in US-led trade negotiations, which could set the rules of engagement for the region. This would ideally spread more market-based principles to partners outside of explicit agreements, or perhaps influence negotiations like the RCEP or the Asia-Pacific Economic Cooperation (APEC) efforts.

*Currency.* State manipulation of currency is also problematic. Greater standards of transparency and commitments to refrain from manipulation also appeared in recent trade negotiations in the Asia-Pacific region for the first time in history – language that went beyond that of past G-7 or G-20 communiques. However, while there is reason to have explicit written agreements on these matters, they must be handled carefully to avoid even the appearance of interfering with central bank independence or compromising the flexibility of monetary policymakers to stimulate the economy during slowdowns or crises when appropriate.

While manipulating currencies is unacceptable, the costs of imposing unintentional constraints on monetary policymakers at the wrong time could be catastrophic, presenting a possible argument for leaving currency agreements outside the trade dispute settlement mechanisms useful for enforcing labour provisions, for instance.

## The future of US engagement in Asia

The United States has a great deal to lose by stepping back from Asia – US geopolitical influence in a key strategic region; the welfare of millions of US workers, farmers, and business owners; and the ability to help establish rules to support worker protections and fair trade now and for future generations. Many elements of and lessons learned from other recent trade negotiations could be salvaged to re-establish an increasingly nondiscriminatory, market- and rules-based trading system of benefit to the United States in the region.

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## About the author

**Katheryn Russ** has expertise in open-economy macroeconomics and international trade. She is a faculty research associate in the National Bureau of Economic Research International Trade and Investment Group and recently served as Senior Economist for International Trade and Finance for the White House Council of Economic Advisers. She is a research advisor at the Halle Institute for Economic Research and has been a visiting scholar at the central banks of Germany, France, and the Federal Reserve Banks of St. Louis and San Francisco, as well as a research associate of the Institute for Globalization and Monetary Policy at the Federal Reserve Bank of Dallas.

She has written numerous articles on international trade and finance, including journals such as the *Journal of International Economics* and *American Economic Journal – Macroeconomics*, and served as guest editor for a special issue of the *IMF Economic Review* on international banking.

# 16 Renegotiating NAFTA: The role of global supply chains

**Emily J. Blanchard**
Dartmouth College

The Trump administration has been outspoken in its criticism of the North American Free Trade Agreement (NAFTA), which the President has called 'the worst deal ever made.' This disparagement is not just campaign-season hyperbole. Closing in on his hundredth day in office, Trump reportedly drafted – though ultimately nixed – an Executive Order withdrawing the United States from the agreement.[1] He has also repeatedly issued public promises to renegotiate or withdraw from the pact: 'If they don't treat [us] fairly, I am terminating NAFTA.'[2] At the same time, supporters of the deal predict calamitous effects of raising barriers between the United States and its two closest trading partners, Mexico and Canada.

Here's the thing: while NAFTA may have done little to boost or harm overall growth and prosperity on the continent, it has had a powerful role in redefining how and where products are made.[3] And so even if NAFTA *had* been a raw deal, abandoning the agreement could have devastating consequences, especially in the near term.

Like it or not, the fortunes of North American firms, workers and consumers are now deeply intertwined through a dense network of regional and global supply chains. This interconnectedness makes the North American economy more competitive with the rest of the world, but also leaves it vulnerable to policy changes.

1 Shawn Donnan "Draft Nafta order signals tougher US stance on trade partners", Financial Times, April 28, 2017.

2 AP News, April 21, 2017 interview transcript: https://apnews.com/c810d7de280a47e88848b0ac74690c83

3 NAFTA had sharp distributional consequences for certain individuals and regions (Hakobyan and McLaren 2016), but the overall impact of the agreement on aggregate US growth and income was both small and positive (e.g. Hufbauer and Schott 2005).

Pulling out of NAFTA would send widespread and long-lasting shock waves throughout the North American economy. To understand why, it helps to first appreciate the extent to which the deal has shaped the current economic landscape of the United States, Canada and Mexico

## Ask not how much a country makes, but how it makes it

In aggregate terms, NAFTA has had a decidedly modest impact on the size and growth of the North American economy. According to one study (Caliendo and Parro 2015), the overall welfare gains from the tariff reductions under the agreement have been largest for Mexico, at roughly 1.3%, while the US has seen much smaller welfare gains of roughly 0.08%; Canada's welfare is estimated to have fallen by 0.06% as the US shifted commercial attention toward its southern border (see also, e.g. Hufbauer and Schott 2005).

In contrast, the evolution in the composition and pattern of economic activity since NAFTA has been profound. Over the past twenty years, the North American economy has grown up and around and through the policy scaffolding afforded by the provisions of the agreement (Hanson 2001, Bair and Gereffi 2002). According to Caliendo and Parro (2015), the tariff reductions alone under NAFTA caused the volume of intra-North American trade to rise by 41% for the United States, 11% for Canada, and more than 118% for Mexico.

While NAFTA was neither great nor terrible for the size of the overall economy, it was a game-changer for how the North American economy works.

To be clear, not all of the increase in North American trade is due to NAFTA alone. Since (especially) the 1990s, the world has seen a revolution in the nature of global commerce. Technological and logistical innovations (together with increased economic openness) have spurred on the phenomenon known as *production fragmentation*: the ability to design, source, assemble, and refine products through increasingly complex domestic and global supply networks (Johnson and Noguera 2017, Fort 2017, Bernard *et al*. 2017). NAFTA did not create these global supply chains, but its rules governing commerce at and behind North American borders allowed them to flourish.

The products that Americans consume – everything from a toaster to an iPhone or Audi Q5 – are produced by combining and recombining constituent parts through often-complex supply networks. These stretch from design to mining and farming of raw materials to construction and marketing of the final goods that ultimately shape our lives. Supply networks weave together the economic fortunes of firms and workers from the headquarters of multinationals and refineries of heavy industry to independent assembly plants, cottage industries, and small farmers.

This is especially true in North America, where NAFTA's tariff reductions and 'deep provisions' – like regulatory reforms and investment protections – have created one of the world's most integrated regional economies. In turn, greater specialisation and fluidity within the production process has helped to keep North American products competitive with the rest of the world (Hufbauer and Schott 2005).

At the same time, production fragmentation has afforded firms and workers the chance to specialise in increasingly narrow slivers of the global production process, carving out a competitive niche in the global marketplace. As a result, more workers and more firms now take part in regional and global trade than ever before.[4]

## Production fragmentation rewrites the book on how to think about trade policy

Most importantly from a trade policy perspective, production fragmentation knits together the economic interests of firms (and workers) up and down the supply chain. This twenty-first century trade also redefines the 'winners' and 'losers' from increased trade: in the era before foreign direct investment and global supply chains, trade liberalisation often benefitted local consumers at the expense of local producers. But with these linkages, the producer-side gains from trade that used to accrue only to foreign exporters are shared – and often divided differently – on both sides of the border (Blanchard 2010).

4 Baldwin (2016) makes a compelling case that GSCs have democratised trade.

Consider two scenarios to illustrate the point. In scenario A, a traditional producer in Mexico makes a product (say, camping tents), from start to finish, in its local manufacturing facility, which it then exports to consumers in the US. If the US lowers its tariffs on tents imported from Mexico, more tents are sold and at a lower price, and the gains are split between US consumers and the Mexican producer: end of story. Contrast this with Scenario B, in which the Mexican producer conducts the final assembly of camping tents, using parts (fabric, thread, plastic coatings, metal fittings, etc.) imported from the US and design services developed in Canada. Now, if the US lowers its tariff against tents from Mexico, the producer-side gains will be shared among the downstream Mexican assembly plant, the US suppliers of intermediate inputs and the Canadian design firm.[5]

These supply chain linkages mean that some – potentially even *all*, depending on the nature of supplier contracts – of the production-side gains from trade liberalisation are passed back up the supply chain to upstream firms and workers, including those in the country that is lowering its tariffs. This changes the fundamental calculus of trade protection.

By lowering US tariffs on goods imported from Mexico and Canada, the NAFTA directly benefits US-based suppliers of inputs used to produce its neighbours' exports.[6] The more interwoven are North American supply chains, the more broadly shared are the gains from NAFTA's open borders.

## The vulnerability of interdependence

The flip side of the new opportunities afforded by open borders and production fragmentation is that some workers (often in the US) have suffered job losses as firms have moved in-house operations abroad (often to Mexico) and away from more expensive existing factories. In the US, these job losses have been highly concentrated in a handful of regions and worker-groups, to devastating local and personal effect (Hakobyan and McLaren 2016).

5 See Blanchard *et al*. (2016) for formal treatment.

6 The trade-liberalising influence of multinational firms and GSCs on trade policy in practice is demonstrated in Blanchard *et al.* (2016) and Blanchard and Matschke (2015)

The subsequent populist reaction against globalisation in general, and NAFTA in particular, should not be surprising. And indeed, in 2016, President Trump was elected in part based on his sharp opposition to existing free trade deals.

While the deep integration of North American supply chains has increased overall efficiency, it has also sharpened political and economic divisions, and left the economic system more vulnerable to potential disruptions in the freedom to move goods and services across borders. The sitting President has vowed to disrupt the existing NAFTA structure: what is at stake if he does?

## What will happen if NAFTA is reversed?

It cannot be emphasised enough: reversing the current NAFTA policy environment will not simply wind back the clock to the pre-agreement economy from 20-plus years ago. Instead, it would throw spanners and blockages into today's very different and deeply integrated North American economy.

Today, much of every of dollar that the United States spends on imports from Mexico consists of US 'value added', the benchmark measure of upstream, supply chain inputs. Due to NAFTA's supply chains, a considerable share of Mexican production consists of Canadian value-added as well. And *vice versa*.

If NAFTA were abandoned, the short-run consequences for firms and consumers could be devastating until – or unless – global supply chains adjust to a new (or no) NAFTA world (and we do not know how long that would take).

Abandoning the key tenets of NAFTA – *especially vis-à-vis trade with Mexico* – could have a profound negative impact on the economies of all three signatory nations. According to recent research on the auto industry (Head and Mayer 2016), withdrawing from NAFTA would reduce the US's share of world auto production, not least because it would force an expensive reversal of North American automotive supply chains. One economic simulation predicts that all three NAFTA signatories would suffer losses from a return to MFN tariffs, with the most acute consequences predicted for Canada and Mexico; in contrast, the same simulation predicts that the rest of the world would see a relative gain in market share as North American car makers become less competitive.

Under a separate worst-case 'Trumpit' scenario (in which NAFTA is replaced with Trump's threatened 35% tariff against Mexico), the same study predicts that Mexico's share of world auto output would decline by a startling 41%.

There is, thus, not only an enormous potential *internal* cost of withdrawing from NAFTA, but also a potential *external* cost: retreating from open borders would almost certainly damage North America's ability to compete with the rest of the world, perhaps dramatically. This relative disadvantage would be compounded by the potential efficiency gains in 'Factory Asia', already a fierce competitor of the North American economy, if Asia Pacific nations implement RCEP (China's proposed regional free trade agreement). Initially an answer to the proposed Trans Pacific Partnership, RCEP is now the only game in town and possibly all the more potent, as a result.

## Uncertainty isn't helping.

Even without renegotiation, uncertainty around even the *potential* for a NAFTA withdrawal is likely to damage the North American economy. Tough talk on trade has a chilling effect on firms' willingness to make new investments or supply contracts on either side of the borders in question. Research demonstrates that even in the absence of actual changes in trade policy, this induced uncertainty can be every bit as costly as tariffs themselves (Handley and Limão 2017).

## Given the stakes, what can we expect?

It is hard to know how the NAFTA shake up will play out. Is the President's tough talk just a high stakes gambit calculated to improve US bargaining positions on the Mexican border wall or the long-standing dispute over Canadian softwood lumber? Or is it possible that core tenets of NAFTA – tariffs and other 'deep' provisions (e.g. rules of origin, bilateral safeguard provisions, etc.) are truly on the table?

The outcome presumably will hinge on domestic politics, where the competing influences of Trump's populist supporters are pitted against powerful multinational firms who vie for the President's attention. For much of the 20$^{th}$ century, US trade policy has seemed a better reflection of the latter,[7] but this has proven to be a year of surprises.

That said, rhetoric aside, recently leaked documents suggest not an across-the-board increase in tariffs against our trading partners, but a reopening and renegotiating of deep agreement provisions on labour and environmental standards, intellectual property and digital trade protections, state owned enterprises, and rules of origin.[8]

Notably, these provisions appear to be close parallels to the proposed building blocks of the now-abandoned Trans-Pacific Partnership. Updating NAFTA's outdated rules would be to everyone's benefit.

Trade is not a zero-sum game, and if we play our cards right on NAFTA, everyone could gain. But a negotiating misstep could trigger a wholesale collapse of the agreement. Given the extent of deep supply chain connections, there is every reason to expect that severing ties would cause hardship on all sides.

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## About the author

**Emily J. Blanchard** is an associate professor at the Tuck School of Business at Dartmouth College, where she specialises in the economics and politics of globalisation. Professor Blanchard's research centres on two key questions: how are trade institutions and agreements evolving in response to global supply chains and foreign investment, and how does education affect the distribution of gains from globalisation? Blanchard's work is published in leading academic journals, and she has been called on to provide research and analysis for the World Trade Organization, the World Bank, and other government and think tank venues. Prior to joining the Tuck faculty, Blanchard was an assistant professor of economics at the University of Virginia. She graduated with honours from Wellesley College and holds a Ph.D. in Economics from the University of Wisconsin-Madison.

# 17 Trade enforcement in the Age of Trump

**Meredith A. Crowley**
University of Cambridge and CEPR

Donald Trump has promised to undertake an aggressive review of US trade policy. This protectionist stance consists of threats to raise tariffs on imports from China and Mexico, cancelling America's participation in the TPP, proposing a renegotiation of NAFTA, 'America First' policies, enhanced enforcement of fair trade and an investigation to restrict steel imports under an obscure national security provision of the 1962 Trade Expansion Act. While Trump's language has run hot and scattershot, there is reason to believe that implemented trade policy will be guided by the cooler heads of experienced policymakers. Already, Trump's rhetoric to fight China's undervalued currency has given way to the US Treasury's informed appraisal that China is not a currency manipulator.

Does this softening stance on China's currency – a core theme of Trump's stump speech – bode more softening on the international trade front? This seems unlikely given the professed views of Robert Lighthizer, the Trump administration's nominee for USTR. If anything, the fact that challenges to exchange rate policy are off the table (for now) will likely put more pressure on the administration's trade policymakers to do something, and in turn speaks to the likelihood of enhanced trade enforcement. Thus, it is important to review the US experience with trade enforcement tools and policy barriers to imports; the last 40 years can be used to predict the types of trade restrictions the Trump administration could pursue to reduce competition from imports in the US domestic market.

Since the establishment of the WTO in 1995, the United States has consistently addressed the problem of industry-specific import surges with the WTO-permitted trade enforcement policies known as antidumping, safeguards, and countervailing duties.

Collectively, these trade-restricting policies covered an average of 4.9% of products imported into the US annually over 1995-2013 (Bown and Crowley 2016, Table 5). These policy tools are sometimes referred to as trade remedies because they are used to remedy or offset the disruptive effect of competition from imports on domestic firms and workers. Safeguards are import tariffs or quotas that a country can use to restrict fair, but disruptive and injurious import surges. In contrast to safeguards, the 'fair trade remedy', antidumping and countervailing duties are import tariffs designed to offset the impact of unfair trade due to anticompetitive practices by foreign firms (i.e., unfair pricing or 'dumping') and government subsidisation of exported merchandise, respectively.

The overwhelming majority of trade remedies employed by the United States are antidumping duties (Bown and Crowley 2016, Figure 10). For a variety of legal, economic, and political reasons, safeguards have always taken a back seat to antidumping duties as a tool for controlling import surges. In fact, while imposition of an antidumping duty requires the domestic import-competing industry to document that unfairly traded imports have harmed the industry's sales and profits, the most salient economic factors in both antidumping and safeguards cases are the same. Although antidumping duties can only be imposed when there is evidence of unfair, low pricing by foreign firms, the critical factors in deciding these cases have always been evidence of high import growth and associated harm to domestic import-competing firms. Bown and Crowley (2013a) showed that over 1997-2006 the determinants of US antidumping duties and safeguards measures at the industry level were high import growth from a particular trading partner and relatively inelastic export supply and import demand for the product in question; one standard deviation increases in bilateral import growth and in the log of the inverse of the sum of import demand and export supply elasticities raised the probability of a new trade remedy by 22% and 106%, respectively. Political variables, such as the total employment in an industry, and measures of relatively weak industry performance were also quantitatively important determinants of temporary trade barriers.

What other factors have driven the application of US special import restrictions? Until the onset of the Great Recession in 2008, a weak aggregate economy was a key determinant of the number of products that would come under new antidumping orders and safeguards in any given year.

Bown and Crowley (2013b) estimated for five high-income economies (Australia, Canada, the EU, South Korea, and the US) over 1988:Q1-2008:Q3 that the number of products coming under new trade remedies increased by 52% in response to a one standard deviation increase in the change in domestic unemployment, by 60% when GDP growth in foreign trading partners weakened by one standard deviation, and by 33% when the importing country's currency appreciated by one standard deviation relative to a trading partner's currency. These findings confirmed the role of antidumping policy as something more than just a policy to address unfair trade; the empirical data suggested a much wider application of antidumping to address the combined stresses of product-specific import surges, at least partly driven by weak economic conditions abroad, and weak domestic economic conditions. Although safeguards had been designed to help governments deal with dis-employment or falling domestic production caused by high import growth, in practice antidumping policy filled this role.

How has trade policy changed over the past ten years? The most notable feature was the virtual absence of trade remedies in the Great Recession. Bown and Crowley (2013b) used their estimated model from 1988:Q1- 2008:Q3 to predict the number of products likely to be protected by a trade remedy policy during the Great Recession, given the observed high rate of unemployment and the collapse of foreign GDP growth. They found that, while the model predicted new temporary trade barriers on 15.4% of the US's non-oil imports, only 0.9% of imports actually faced new measures. They attributed this missing trade protection to a coordinated commitment to refrain from protectionism by G20 members and a steady decline in the value of the dollar after September 2008. At the same time, extensive use of programmes to boost demand for manufactured goods, like 'cash for clunkers' to stimulate purchases of new automobiles, benefited many of the manufacturing industries that historically received protection from imports during recessions.

However, as shown by Autor *et al*. (2013) and Pierce and Schott (2016), growing trade with China contributed to a sharp decline in manufacturing employment after 2001. Although trade with China reduced consumer prices and raised welfare (Handley and Limão, forthcoming), the worsening situation for US manufacturing employment prompted voter support for the anti-trade policies that Trump advocated on the campaign trail.

But how will Trump follow through with these promises? The viability of continued or expanded use of antidumping is currently called into question. Firstly, in a series of WTO dispute settlement rulings since 1995, trading partners have successfully challenged the US methodology to assess the magnitude of dumping margins in antidumping cases. These rulings on 'zeroing' now constrain the US's ability to impose the high antidumping duties that US firms and their workers desire. Secondly, if Trump's plans to stimulate the US economy through infrastructure spending and tax cuts come to fruition, then the associated growth in US GDP would make it difficult for domestic firms to prove that they are suffering the injury due to increased imports – falling sales, rising layoffs, declining capacity utilisation – necessary to legally justify antidumping protection. Both of these factors could drive US policymakers to look for new, alternative forms of import protection.

An additional factor impacting antidumping is that, at the end of 2016, a provision of China's accession terms to the WTO that enabled the US (and other WTO members) to easily impose high antidumping duties was set to expire. Anticipating the expiration of this provision, US trade enforcement policy toward China began to shift, several years ago, away from exclusive reliance on antidumping duties toward increased usage of countervailing duties to offset the export-stimulating effect of Chinese industrial policy. Increased reliance on countervailing duties could be a viable strategy to restrict imports from China for some products, but the US must demonstrate that these exporting sectors benefited from Chinese government support. If there is no government support or if the support does not fall within legal definitions outlined in the WTO subsidies agreement, then countervailing duties cannot be used.

These developments set the stage for the use of new (or recycled) trade policy tools under Trump. Instead of antidumping duties, there may be a return to Reagan-era quantitative restrictions like voluntary export restraints (VERs). The most famous of these was a negotiated agreement, in effect from 1980-1994, by which Japan voluntarily restricted the number of autos exported to the US; this arrangement benefited both American automakers and Japanese automakers, who were able to increase prices on autos at considerable cost to American consumers.

The legal policy environment of 1980 bears some similarities to the current situation in that the policy space was constrained by law – the Carter administration had sought safeguard restrictions on imports of Japanese autos but was blocked by the US International Trade Commission which concluded there was no legal justification for import restrictions. Further, similarities in the economic environment of 1980 and today exist – employment in the US auto sector in 1980 had been decimated by the effects of the oil shock, the recession, and the consequent shift in consumer demand toward small cars. Similarly, US manufacturing employment, even by 2017, remained well below the pre-Great Recession level. However, there are important economic differences between these two periods – 1980 was the height of a recession while 2017 is a period of accelerating growth. The depth and strength of cross-border production chains in 2017, something that did not exist in 1980, implies that attempts to restrict imports might be met with resistance.[1]

Even though WTO rules prohibit the use of voluntary export restraints, there are a number of reasons why they may return. Firstly, the EU routinely imposes price undertakings as an alternative to antidumping duties in unfair trade investigations. Although price undertakings are substantively the same as prohibited VERs, they are permitted under WTO rules when they are the outcome of an antidumping investigation. Between 1989 and 2011, 18.1% of all EU antidumping investigations and 34.5% of antidumping investigations against developing countries resulted in price undertakings – agreements by foreign firms to restrict their exports to a level dictated by the European Commission, at a minimum price determined by the Commission (Bown and Crowley 2016, Table 7). Secondly, this is the type of creative approach to restricting imports that USTR nominee Lighthizer had a hand in administering during the Reagan years.

1 As far back as 2001, George W. Bush's Global Steel Safeguard was immediately challenged by US firms who used imported steel as an input in production.

Finally, although VERs have a dubious status under WTO rules, if both importing and exporting governments want them, then neither party is going to challenge the arrangement at the WTO.[2]

To summarise the likely trade policy tack of the new administration, expect to see a combination of traditional WTO policy tools – antidumping duties, countervailing duties, and safeguards – and more creative approaches to restricting imports, including negotiated export restraints and price undertakings and unilateral application of more obscure trade laws, like the national security provision of the 1962 Trade Act. Tellingly, in his 2010 testimony to Congress, USTR-nominee Robert Lighthizer noted that some provisions of the WTO agreements could be interpreted in ways that would open up new policy options that are not part of the standard WTO arsenal. This suggests an aggressive approach in which the US tests the boundaries of WTO rules, in an effort to expand America's trade policy toolkit.

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## About the author

**Meredith A. Crowley** is a University Lecturer at the University of Cambridge and a Fellow of St. John's College. She is also a Research Fellow at the Centre for Economic Policy Research (CEPR - London). Her research on international trade, multinational trade agreements, and trade policy has appeared in numerous peer-reviewed journals including the *American Economic Review*, the *Canadian Journal of Economics*, the *European Journal of Political Economy*, the *Journal of Development Economics,* the *Journal of International Economics* and *World Trade Review*. Prior to arriving at Cambridge in 2013, Crowley was a Senior Economist at the Federal Reserve Bank of Chicago. She received bachelor's degrees in Asian studies and chemistry from Bowdoin College in Brunswick, Maine, a master of public policy degree in international trade and finance from Harvard University, and master's and doctorate degrees in economics from the University of Wisconsin-Madison.

# 18 What next for US-Europe trade policy?

**Nikhil Datta and Swati Dhingra**
University College London and CEP; London School of Economics, CEP and CEPR

The economies of Europe and the United States are inextricably linked, they are the world's two largest economies, the EU is the US's largest trade partner (excluding the NAFTA trading bloc), while the United States is the EU's largest external trade partner in both goods and services.[1] The US Department of Commerce estimates that US exports to the EU support around 2.6 million American jobs, while almost 200,000 European companies sell goods and services to the United States.[2] Furthermore, the two economies make up around 60% of the world's inward stock of foreign direct investment (FDI), and over 80% of the world's outward stock of FDI, a large portion of which is due to flows between the two (European Parliament 2016).

In an ideal world, a number of factors motivate a trade deal such as the Transatlantic Trade and Investment Partnership (TTIP). However, given the June 23, 2016 Brexit referendum in the UK and the November 2016 US election results, as well as a number of other pre-existing complications, achieving such agreements (now both EU-US and UK-US) will be highly contentious.

1 Based on data from US Dept. Commerce (2016), European Commission (2016a) and Eurostat (2016a).

2 Based on data from US Trade Representative (2013) and European Commission (2016b).

## Tricky but achievable – tariff cuts

The first obvious point of call in a trade deal is tariffs. Most Favourable Nation (MFN) import tariffs for both the EU and the United States are, on average, low, and there is a good chance the UK will maintain the tariffs it currently operates as an EU member, after Brexit is complete (HM Government 2016). The weighted mean tariff for all products, for both the EU and US is 1.6%, and thus, at face value, it appears changes to tariffs are relatively unimportant.

However, as often can be the case, averages have a habit of hiding some sector specific high tariffs. For example, the EU tariff on motor vehicles is 10%, while the US counterpart is 2.5%, similarly EU tariffs on fish can be as high as 25% while US tariffs on fabrics and apparel are at similar levels. Leaked TTIP documents showed that, as of negotiations at the end of 2015, tariffs would have been reduced by up to 97.5% (von Daniels and Orosz 2016). It's no surprise that the trade deal received backing from business groups such as the German Association of the Automotive Industry, who estimate that tariffs cost the industry approximately €1 billion per year (IMCO 2015).

## Trickier but reasonable - non-tariff barriers

While tariffs are the starting point of trade agreements, the most important motivating factor of modern trade deals is the removal of non-tariff barriers (NTBs), such as regulatory differences, through harmonisation of standards and customs procedures and regulatory cooperation across borders. Examples of divergent regulation include differences in safety standards, environmental and emissions regulations, eligibility of foreign firms for government procurement, and competition policy, while NTBs in customs procedures generally relate to things such as port inspections and rules of origin.

The regulatory divergence between the EU and United States is non-trivial and far ranging. One significant difference is the statutory application of the precautionary principle in EU law, which has no similar equivalent in the US. The precautionary principle, which results in the burden of proof of *safety* falling on those wishing to take an action in the absence of scientific consensus, has implications for regulations related to environmental, pharmaceutical, agricultural and product standards.

As highlighted by Fontagné *et al*. (2013), there are some simple solutions to closing these differences, such as an extension of mutual recognition of technical standards and expanded labelling for food products. However, when regulation exists due to a clear difference in preferences, convergence is generally problematic.

A review of studies by Berden and Francois (2015) found the trade cost equivalent (TCE) (i.e., the synthetic *ad-valorem* tariff equivalent) on all goods between the EU and US range between 12.9% to 13.7%, with some sectors such as agricultural products, beverages and tobacco, pharmaceuticals and processed foods being considerably higher. Importantly, for modern economies such as the US and the UK, where the majority of employment is now in the service sector, they find estimates of TCEs for the service sector ranging between 8.5% and 47.3%, with specific sectors such as business services and financial services facing on average around 30% TCE. All studies reviewed conclude that NTBs matter, and more so than tariffs. A report by ECORYS commissioned by the European Commission (Berden *et al*. 2009) suggested that between 25-50% of these NTBs could be removed, and, in the more optimistic scenario, exports would increase by 6.1% for the US and 2.1% for the EU. According to a study from the CEPR (Francois *et al*. 2013), a FTA that removed 25% of NTBs would boost trade by 75% more than a FTA that removed only 10% of NTBs.

These estimates apply to the EU, inclusive of the UK. In a post-Brexit world, matters get somewhat more complicated. The UK government has made it abundantly clear that they wish to exit the EU Customs Union so they can pursue their own trade deals with the likes of the United States (HM Government 2016). This seems like a logical way of making up for the losses in trade and investment that would arise when the UK breaks away from its largest trade and investment partner – the EU. Estimates suggest that wiping out tariffs between the UK and the US would make up for just a tiny share of the losses from Brexit. This is because the US is a more distant market for the UK so there is naturally less trade between them. With tariffs already low, expansion in UK-US trade would need a lot more regulatory harmonisation (Dhingra *et al*. 2017). Given that the UK currently operates the same regulatory framework as the rest of the EU, the same regulatory divergence problems arise in the UK-US relationship. And, without the clout of the EU, UK trade negotiators would have much less bargaining power in getting a good deal from the US, for obvious reasons (both the US's GDP and population are approximately five times larger than the UK's).

The implementation of regulatory cooperation between the US and the UK would also face practical difficulties. Outside of the EU, the UK will need to replicate around 34 different regulatory agencies for various sectors (Fraser 2017), which are currently operated through the EU. This would require a large increase in nuanced expertise and civil servants, and likely be infeasible given the current two-year time frame for Brexit. The UK could stay under the remit of some EU regulatory agencies, and this may well be a necessary part of a new trade agreement between the UK and EU. But this would mean the UK needs to resolve its new trading arrangements with the EU before attempting to lower NTBs with the United States. Furthermore, constraints on this would still apply in sectors that continue to be overseen by EU regulatory agencies, unless an EU-US deal is struck in tandem. Any potential US-UK trade deal is therefore likely to be delayed for at least a couple of years, despite the enthusiasm of their current governments.

## The achievable and the reasonable – trade and income impacts

The big gains from a transatlantic deal will come from lower tariffs and NTBs. Estimates from the CEPII (Fontagné *et al*. 2013) suggest that the impacts of a TTIP-like deal on incomes would be non-trivial. In particular, in the scenario of a complete phase-out of tariffs combined with a 25% decrease in NTBs, the EU would see a $98bn positive impact to GDP while the US would experience a $64bn gain. Estimates from ECORYS (European Commission 2016), suggest similar impacts to GDP of around 0.3% for both areas, while also predicting an increase of 0.5% for wages of both high and low-skilled workers by 2030. In addition, on the labour front, while most models aren't able to predict employment effects due to assumptions of full employment, some estimates of labour displacement for a 2027 benchmark range between 0.2%, in a less ambitious deal, to 0.65%, in a more ambitious deal (Francois *et al*. 2013).

These estimates are not without contention however. Civil society organisations have highlighted the failings of estimates of previous trade agreements such as NAFTA (e.g., Hilary 2015). One of the most widely cited studies (Hufbauer and Schott 1992) predicted a large 130,000 employment gain for the US, while another predicted an approximate 0.3% welfare gain coupled with a 0.2% increase in real wages for the US, and a 0.7% welfare gain for Canada (Brown *et al*. 1992).

When compared with *ex post* studies, such figures appear highly inaccurate. Recent work finds that the US's welfare increased by just 0.08%, while Canada's declined by 0.06% (Caliendo and Parro 2014). Importantly, labour market evidence points to dramatically lower wage growth for blue collar workers in the US, and knock on effects to service workers in their localities as a result of NAFTA (Hakobyan and McLaren 2016).

Domestic policies have already failed to do much for those who have been displaced by increased globalisation and technological change. Amid this distrust of globalisation, additional job displacements and churning would make a transatlantic deal even more unwelcome. But by far the greatest discontent from a future transatlantic deal will be based on how the EU and the US deal with the rights of foreign investors in the agreement.

## Avoiding the death knell: Investor to state disputes

Foreign investment is the 'real driver' (Gambini *et al*. 2015) of the transatlantic economic relationship. The EU and the US account for about 40% (Eurostat 2016b) of each other's inward FDI stock. Any investment-related clause in the trade deal between the EU, the US and the UK therefore has far-reaching implications for firms, workers and consumers.

The TTIP's proposed mechanism for settling disputes between foreign firms and host governments is its most controversial component. The head of trade policy of the UK's Labour Party described it as a 'threat to democracy' (Hilary 2015) and the greatest threat posed by TTIP. Initial texts contained an Investment State Dispute Settlement (ISDS) mechanism (European Commission 2015), which gives foreign firms the right to bring claims against host country governments if they have not been given 'fair and equitable treatment'.

According to economic theory, investor protections, such as ISDS, enable firms to recoup damages from host country governments, if they engage in policies that reduce the returns to sunk investments made by foreign firms (Blanchard 2015). Host country governments might directly expropriate the assets of foreign firms or put in place domestic policies that harm the profitability of foreign investments.

The World Trade Organization disciplines the use of trade-related domestic policies, such as local content requirements or foreign exchange rationing, that favour domestic firms over foreign investors. But it focuses on investment measures that have the potential to restrict or distort trade, and does not cover behind-the-border policies that are not trade-related (Blanchard 2014). TTIP seeks to fill this gap in policy through its proposed ISDS, which would allow foreign investors to dispute any alleged breach of commitments of the host country.

This seems like a sensible approach to attract foreign investments which might otherwise be too risky to undertake in the host country due to its changing political, legal or social circumstances. But one concern is that, under the ISDS, disputes brought by foreign investors are resolved by a tribunal that is outside the scrutiny of the host country's legal system. Another is that the set of behind-the border policies that affect foreign investors is so broad that the threat of disputes can severely limit the policy space available to governments. For instance, Calgary-based company Lone Pine Resources, which is registered in Delaware, has claimed damages for the potential losses from the Quebec government's moratorium on fracking. Although a decision is pending, this case has become the poster child for the chilling effects of ISDS on government's ability to regulate (Beltrame 2013). Many therefore view ISDS as a way of giving foreign firms excessive powers - typically not available to domestic firms - to challenge policies decided by national and local governments, especially in socially sensitive areas like environment, natural resources and public health.

These concerns are also reflected in a recent case against Germany brought by a Swedish firm under the Energy Charter Treaty. After the Fukushima nuclear accident in March 2011, Germany announced it would withdraw the operating licences of eight nuclear power plants, which included two plants of the Swedish company Vattenfall (World Nuclear News 2014).

Vattenfall sued Germany at the International Centre for Settlement of Investment Disputes in Washington DC over the closure of its plants and demanded USD 6 billion as compensation. Meanwhile, the German Constitutional Court ruled that the State has the broad regulatory powers to take such a decision but it must compensate the plants for any unjustified expropriation arising from its decision (Kluwer 2016).

This prompted the question – why must Vattenfall sue Germany through an international tribunal when the domestic legal system is capable of making fair decisions? Civil society groups argue that developed economies with a strong legal system do not need extra-judicial bodies to resolve foreign investment disputes (Bernasconi-Osterwalder and Brauch 2014). As public money is involved, damages should not be decided by arbitrators who are in no way accountable to the public, and whose decisions cannot be reviewed for legal or factual correctness. Prominent cases like these are likely to harden public opinion against TTIP. Already, a YouGov survey from 2016 shows that support for TTIP has fallen dramatically - just 17% of Germans and 18% of Americans believe TTIP is a 'good thing', compared to over 50% two years before (Bluth 2016).

## Treading the populist path

Citizen groups and academics have expressed grave concerns in public consultations[3] about the ISDS, and Parenti (2017) suggests that opposition from member countries like Belgium, France and Germany has prompted the EU to move away from the language of the ISDS. But the EU and the US remain steadfast in their decision to include an investor to state dispute settlement provision in a future deal. This will likely take its cue from the pending EU-Canada Comprehensive Economic and Trade Agreement (CETA).

CETA provides for an investment court system which addresses some of the concerns with the ISDS such as appointing public judges, having an appeal system and tightening the language on what constitutes fair and equitable treatment for foreign investors.

3 Letter from academics available at http://www.citizen.org/documents/isds-law-economics-professors-letter-Sept-2016.pdf. See Chatham House (2015) for discussion on public consultations.

If the investment court system is ratified under CETA, the key source of contention in a future EU-US deal would be largely bypassed. According to the consumer advocacy group, Public Citizen, which was founded by Ralph Nader, over 80% of US-owned subsidiaries in the EU belong to parent US firms that also have operations in Canada. These US firms would already have access to the investment court system through CETA, and would not have to wait for TTIP's investment chapter. The EU expects the investment court system to become the model for its investor dispute settlement process in future trade deals (Biel and Wheeler 2016). But questions over the legitimacy of the investment court system persist (Dearden 2016), and its legality will be decided by the end of 2017 (Dentons 2017).

On the US side, the poll findings of Democracy Corps, in the context of the US Trans-Pacific Partnership, are instructive in gauging how a future debate over investment provisions might play out. A majority of the Americans polled were unfamiliar with the agreement or neutral towards it, but a vast majority – 70% - became more opposed to the agreement after hearing the anti-ISDS statements that were read out to them. If the debate over TTIP centres on investment protections, the public might perceive their governments to be favouring big multinationals, and we might yet see another backlash against future deals between the US and Europe.

This would mean that the potential efficiency gains from streamlining duplicate regulations and tariff peaks would be lost in a zeal to give special rights to foreign investors. There is little empirical evidence that these rights increase foreign investments, so an economically sound alternative is the US-Australia trade agreement, which settles investor to state disputes within the domestic court system. This precedent was motivated by Australia pointing out that developed economies with advanced domestic legal systems do not need ISDS-type clauses because their domestic court systems have an established record of upholding the rule of law (Faunce 2015). The US, UK and EU fit this bill. It's not surprising then that the independent study commissioned by the UK's Business, Innovation and Skills department concluded that ISDS-type clauses would provide little economic benefit and expose the State to meaningful political costs (Poulsen *et al*. 2013).

In the current era of strong anti-globalisation sentiments, even small political costs could heighten economic nationalism. Recent political developments – Trump, Brexit and the anti-EU rhetoric - reflect a desire to rebalance economic power and reclaim sovereignty (Colantone and Stanig 2017). After years of uneven economic growth and austerity cuts, people have used their votes to express anger at the political establishment and their failed economic policies (Dhingra 2016). Proposing trade deals that give special rights to foreign investors, based in countries less aligned to the existing preferences of citizens, would alienate people further, and likely derail future transatlantic partnerships.

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## About the authors

**Nikhil Datta** is currently a research assistant at the CEP working on both labour and trade programmes, with Professor Stephen Machin and Dr Swati Dhingra respectively. He is also a PhD student in Economics at UCL. His main area of focus currently is on labour demand, in particular concerning minimum wages, the gig economy and career progression. He is also involved in assessing the impacts of free trade agreements, and looking into the effects of Brexit at both a national and local level, and possible policy responses.

**Swati Dhingra** is an Assistant Professor at the Department of Economics at LSE. Before joining LSE, Swati completed a PhD in Economics at the University of Wisconsin-Madison and was a Fellow at the Department of Economics in Princeton University. Her research interests are international economics, globalisation and industrial policy. Her work has been published in top economic journals including the *American Economic Review*. She is Associate Editor of the *Journal of International Economics,* and was awarded the FIW Young Economist Award and the Chair Jacquemin Award by the European Trade Study Group for her work on firms and globalisation. Swati is a member of the Globalization group at the Centre for Economic Performance, and has made regular contributions to work on Brexit.

The Presidency of Donald J. Trump has generated considerable uncertainty for a wide range of areas of U.S. economic policy. This collection of essays by leading economists highlights many of the most pressing domestic and international economic policy issues on the Trump docket. The flurry of activity in the Trump administration's first '100 days' in office signals a number of potential changes on the horizon. Attempts on health care and tax reform were legislative and thus involved the U.S. Congress, whereas efforts on immigration, NAFTA and other areas of trade policy arose through Executive Orders or were taken under unilateral exertion of Presidential authority. Some of the policies considered by this volume as being subjected to potential reform – including health care, taxes, and financial sector regulation – may have arisen, independent of the individual sitting in the Oval Office. But others – such as central bank independence, more radical steps on immigration, and reversing the U.S.'s decades-long approach to trade policy and commitment to international cooperation – are much more extreme, far-reaching, and potentially even more troubling. On Trump's economic policies, the broad consensus across this volume's authors is one of watchful wariness and considerable concern. Many of the Trump administration's proposed economic policy changes have the potential for significant short- and long-run disruption to the U.S. and global economy.

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Centre for Economic Policy Research
33 Great Sutton Street
London EC1V 0DX
Tel: +44 (0)20 7183 8801
Email: cepr@cepr.org www.cepr.org

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