Bulletin

frontier economics

Trade in turbulence

THE IMPLICATIONS OF RECENT DEVELOPMENTS IN US TRADE POLICY

The attitude taken by the new US administration to trade policy appears to foreshadow an increase in protectionism, with alleged actions by countries including Germany and China being singled out for particular criticism. But is there any justification for the administration's claims, and what might trade restrictions designed to promote growth in American manufacturing herald for these countries and the US itself? In this bulletin we argue that the reasons invoked for protectionism have little or no economic basis, and that – while there may be legitimate concerns about the distributional impacts of trade – such a policy stance would be damaging to both the US's own self-interest and to world trade more generally.

In his inauguration speech, US President Donald Trump made the claim that protectionism "makes you better off", and vowed to "buy American, and hire American". He has followed up his rhetoric by withdrawing the US from the recently concluded Trans Pacific Partnership (TPP). This decision also probably seals the fate of the negotiations between the EU and the US on the Transatlantic Trade and Investment Partnership (TTIP), which had already reached an impasse because of opposition by certain EU Members States.

In addition, the US administration has threatened to levy duties on imports, particularly those originating in certain trade partners, notably Mexico, China and Germany. The targeting of Mexico is partly connected to the administration's proposals to control immigration by building a wall along the US-Mexico border, and also to a sense of grievance that Mexico runs a surplus in bilateral goods trade with the US. The targeting of China and Germany is primarily linked to claims that these two countries have benefitted by manipulating exchange rates to artificially low levels in order to increase exports to the US, though there are also undoubtedly wider political issues at play. It appears that the administration's overall intention in pursuing this protectionist stance, is to "repatriate" jobs in the manufacturing sector, and particularly in politically sensitive states that were central to President Trump securing a majority of electoral college votes in the November 2016 election.

> The targeting of China and Germany is primarily linked to claims that these countries have pushed exchange rates to artificially low levels to boost exports to the US

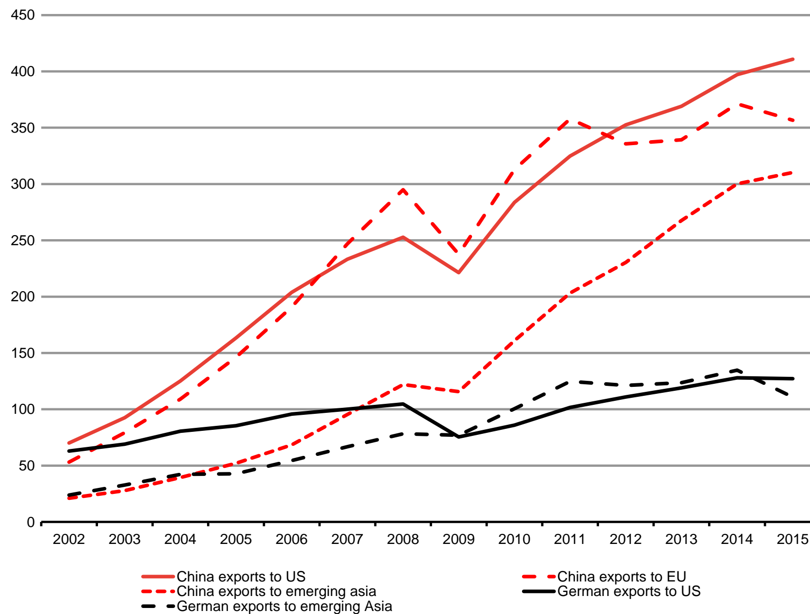
This bulletin evaluates the positions taken by the current US administration, particularly in relation to China and Germany, and argues that they are largely unfounded and likely self-defeating. We also consider the proposals from the perspective of trade rules, and the wider implications they carry for the international trading system.

Trumped charges

Before considering questions of exchange rate manipulation, it is useful to consider recent trends in trade flows between the US, China and Germany. Figure 1 reports the value of exports from, respectively, China and Germany, to the US and other major markets in billions of US Dollars.

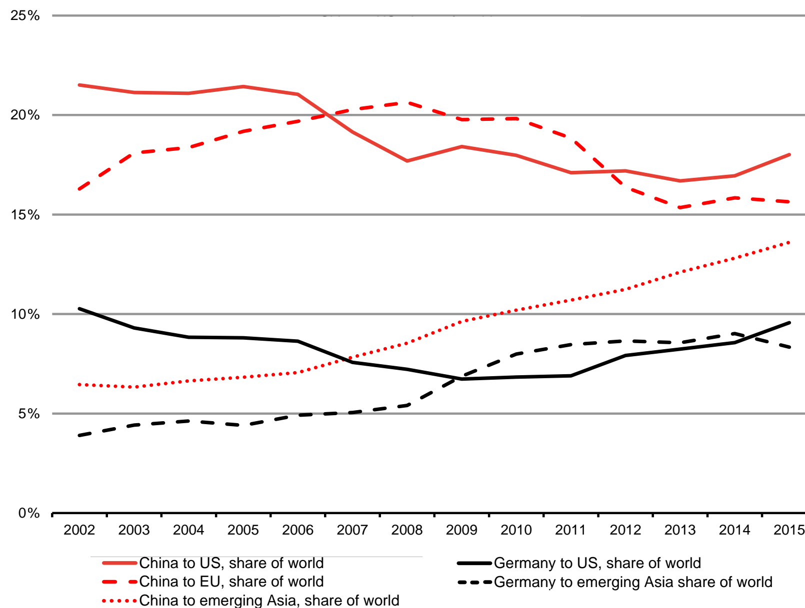
Figure 2 reports the shares accounted for the by the US, as well as other markets, in the overall value of, respectively, German and Chinese exports.[1]

Figure 1 – Chinese and German exports to selected markets, values in billions of current US dollars



Source: IMF Direction of Trade Statistics

Figure 2 – Percentage of total exports from China and Germany accounted for by specific export markets



Source: IMF Direction of Trade Statistics

Figure 1 illustrates, notably, the rapid increase in the absolute value of Chinese exports to all markets, including the US. German exports to the US also increased, but at a much slower rate. What is striking in Figure 2 however, are the shares accounted for by the US in China and Germany's overall exports. The US's share of China's overall exports declined over the period, while

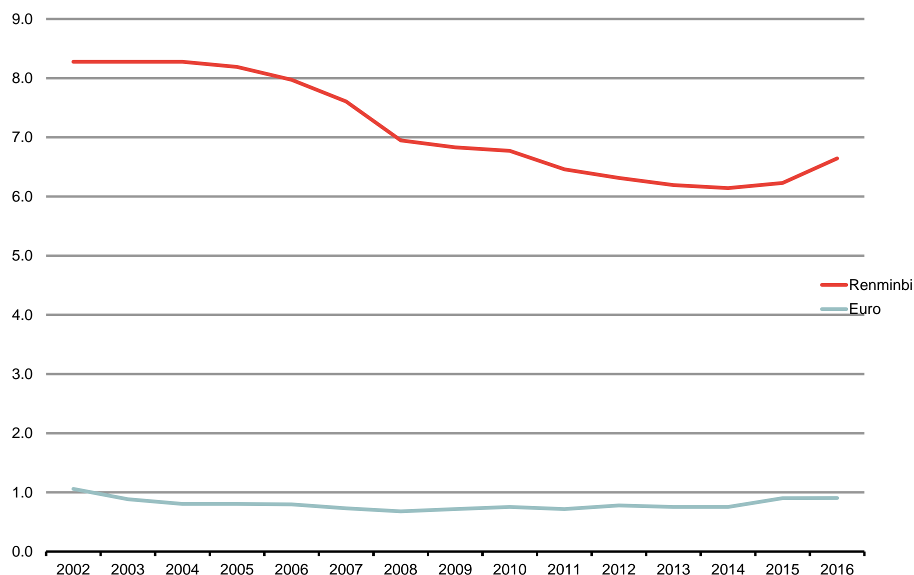
[1] For ease of presentation, and given the large value involved, we do not report German exports to the EU in these graphs. German exports to the EU increased from just under 400 billion to around 900 billion in the period 2002-2011, before fluctuating between around 770 and 850 billion in the period 2012-2015. The share of Germany's total exports accounted for by the EU declined from around 65% in the early part of the period to around 57%.

in the case of the US's share of Germany's overall exports there was a modest decline, followed by reversion, in the last few years, to shares observed in 2002. What is also striking is the very rapid increase in the importance of export to emerging and developing Asia. In China's case, the share of these countries nearly tripled from little more than 5% of China's total exports in 2002 to nearly 15% in 2015, meaning that these markets now rival the US in terms of their importance to Chinese exports. Similarly, the share of emerging Asian markets in Germany's total exports doubled from around 4% to 8% over the same period.

Taken together, these figures indicate that China and Germany have in absolute terms seen an increase in exports, and that these increases have been particularly notable in markets other than the US, leading to greater diversification. The US itself is no exception to this trend. Since 2002, China's share of total US exports has more than doubled, from around 3% to 8%. By contrast Canada, the US's largest single export market in 2002, has seen its share of US exports decline from around 23% to 19%. China may be selling more to the US, but the US is also selling more to China.

The trends in Figures 1 and 2 suggest that there is little merit to the claim that Chinese or German competition has systematically targeted or disproportionately affected US markets. Nor does there seem to be any merit to the claim that Chinese and German exports have increased as a result of exchange rate effects. Figure 3 reports exchange rates for, respectively, the Remnimbi and the Euro relative to the US Dollar. In the case of the Remnimbi, we see period of marked appreciation after 2005 when the formal link to the dollar was abandoned, followed by more gradual appreciation, and a slight depreciation in 2015-16. China has also undertaken progressive steps towards a floating exchange rate,[2] and the International Monetary Fund (IMF) has characterised the exchange rate as "being broadly in line with fundamentals".[3] For its part, the Euro appears to have followed a slightly appreciating path from 2002 to 2008, and a broadly depreciating path between 2008 and 2015. There is some correspondence between the pattern of Euro-dollar exchange rate movements and the share of Germany's exports accounted for the by the US. But it is rough, and this does not provide a basis for inferring that trade flows between the US and Germany are predominantly responsive to exchange rate movements, still less the function of strategic exchange rate action by the ECB.

Figure 3 – Renminbi and Euro, nominal exchange rate versus dollar, 2002-2016; units per dollar



Source: IMF

[2] The IMF characterises the exchange regime in place since 2010 as a managed float.

[3] IMF (2016), The People's Republic of China, Country Report, p 5.

Madness to the method

Setting aside the narrow facts of the case, the broader idea that seems to motivate the administration's approach to trade is that imports from other countries are undesirable, and necessarily a concession to be given up in return for export opportunities for US firms. Hence, imbalances are necessarily an unfair deal, and damaging to the economy. This mercantilist approach to trade was presented in a policy document prior to the election by the Trump administration's chief trade advisor. In one section, the author presents the standard accounting identity for representing the national accounts (in which National Income (Y) equals the sum of Consumption (C), Government Spending (G), Investment (I) and Net Trade (i.e. exports (X) less imports (M)). He uses this identity to infer that because imports into the US have largely exceeded its exports, national income is substantially lower than in a counterfactual case in which the US would have run a trade surplus.[4]

But this is the purest nonsense[5]. The accounting identity is just that – it tells us how income is split between various components, and tells us nothing about causality between changes to these components and changes to growth in national income. Following on the logic employed, massive increases in government spending would also inevitably boost income, regardless of what that spending is directed to. In actual fact, the only thing the identity does tell us about trade balances is that it reflects a shortage of savings relative to different forms of spending, which indeed is the core cause of the US's trade deficit.[6]

If the concern is economic growth, then the key issue to address is productivity. Empirical research consistently documents that countries that liberalise trade see an increase in productivity.[7] Moreover, in an economy close to full employment, such as the US, protectionism is likely to lead to resources such as labour and capital flowing away from efficient sectors (that do not require protection to compete) to less efficient ones, leading to a drag on productivity and therefore growth overall. If the administration wishes to promote a better regional distribution of growth, it would be better advised to consider alternative policy instruments. Recent research, for example, suggests that investments in human capital and innovation would help to redress a slow-down in overall productivity growth rates, as well as regional disparities in productivity growth observed in the United States since the mid-2000s.[8]

In an economy close to full employment, protectionism will lead to resources flowing away from efficient sectors, leading to a drag on productivity and growth

Moving beyond questions of trade deficits and growth, the current US administration sometimes expresses its trade policy objectives in terms of a desire to repatriate parts of value chains that have migrated overseas. The logic seems to be that if value chains are geographically unbundled, a country can capture more of the value added by enticing a greater proportion of that value chain back to its shores. In the US, the extent of off-shoring of parts of the supply chain can be measured by how much of value added in final demand comes from foreign sources. In manufacturing, the share increased from 27% to 40% between 1995 and 2011. This is significant, though considerably lower

4 Peter. Navarro and Wilbur Ross "Scoring the Trump Economic Plan: Trade, Regulatory and Energy Policy Impacts", pp 17-19.

5 Former Treasury Secretary Lawrence Summers has described the proposals as "beyond voodoo economics" and the economic equivalent of "creationism".

6 We can rewrite the accounting identity Y=C+I+G+(X-M) as Y-C= I+G+(X-M). Income (Y) less consumption (C) defines savings (S), which means that Savings = I+G+(X-M). It follows that if the level of savings is less than investment and government spending, then the trade balance (X-M) must also be negative. In other words, trade deficits are always a reflection of insufficient savings. Both household and public savings in the US have been at historically low levels for much of the period since the early 1980s.

7 William Cline (2004), Global Trade Policy and Poverty, contains a good overview of various research findings.

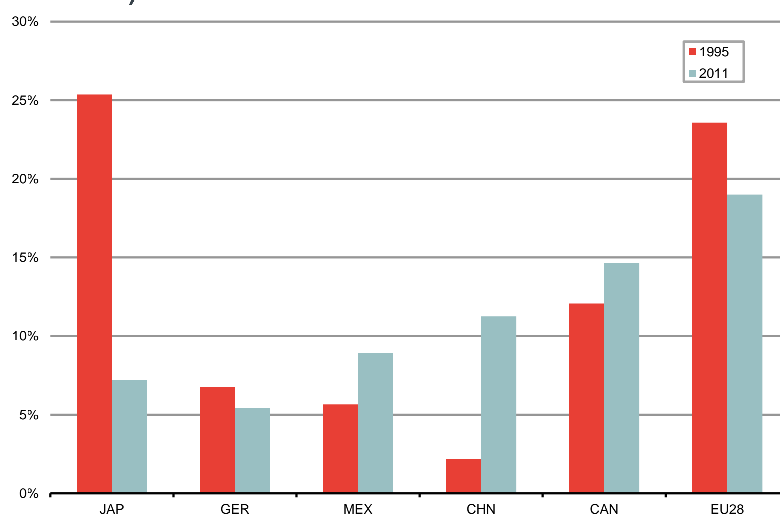
8 Roberto Cardarelli and Lusine Lusinyan (2015), "US total factor productivity slowdown: Evidence from the U.S. States", International Monetary Fund Working Paper, WP/15/116.

than other industrialised economies such as Germany or the UK, where the shares increased, respectively, from 37% to 51% and from 47% to 66% over the same period.[9]

While attracting productive activity can amount to a sensible objective, with desirable distributional effects, trade policy instruments are not efficient instruments to achieve this. Even if we set aside the negative economy-wide effects on productivity discussed above, and focus solely on manufacturing sector supply chains, trade restrictions are likely to be self-defeating because they will reduce the competitiveness of US firms on *export* markets.

To see this last point, consider the role that imported inputs play in a country's exports. Across industrialised countries and major emerging markets, the share of foreign value added in manufacturing exports varies from 18% to close to 50% in some Eastern European countries and in Korea. The US, at 23%, is at the lower end of the scale, but has still seen the share of foreign value added increase over time.[10] The changing composition of foreign value added in US exports is illustrated by Figure 4.

Figure 4 – Selected sources of foreign value added in Gross US exports (share of total foreign value added)



Source: calculations based on OECD Trade in Value Added database

The results suggest that the US's own exports stand to suffer from trade measures imposed on the countries that are within the administration's cross-hairs.[11] In the case of Mexico, the effects on US industry would be exacerbated by the fact that US producers play a significant role in Mexico's exports: around 43% of value added in gross exports of Mexican manufactures comes from foreign sources, and of foreign sources the US is the largest, accounting for nearly 36%.

In sum, because US and Mexican manufacturing are so closely integrated through cross-border linkages, restricting Mexican exports to the US would harm American producers. Conceptually, it would be equivalent to building a wall, not between countries, but between factories that depend on each other. In short, the interdependencies created by global supply chains make trade restrictions a self-defeating approach. Preferable alternatives are broad based measures to strengthen the industrial base, notably policies and investments that support skills, infrastructure and research.

Global wild cards

The Trump administration's proposals also carry several implications for the international trading system generally. As far as arguments regarding currency manipulation are concerned, World Trade Organization (WTO) rules – GATT Article XV, specifically – stipulate that countries cannot frustrate the intent of the WTO agreements through exchange rate actions. But the drafters of the GATT did

[9] Calculations based on data from the OECD Trade in Value Added database.

[10] OECD Trade in Value Added database.

[11] Moreover, because the latest data are from 2011, they likely understate the current contribution of by China to US exports.

not develop any specific rules under which the WTO would make a determination as to whether a country was engaged in currency manipulation. Such determinations were wisely left within the purview of the IMF.

Given its pronouncements on these matters, it is highly unlikely that the IMF would find in favour of the US in the event the US were to launch formal proceedings on this front. The danger then is that the US might pursue unilateral action, which would be a violation of its WTO commitments. In those circumstances, the targeted country – China for instance – would be able to bring a case against the US, and would be authorised to retaliate in the event the US were found to be in violation by the WTO but refused to modify its measures. The net effect would be an escalation in trade barriers that harm both countries (especially in the light of the findings of the previous section) and more generally weaken the environment for international trade.

In order to further its objective of repatriating manufacturing activities to the US, the Trump administration has floated the idea of "border adjustment taxes". The idea of such adjustments was first floated by the Republicans in the US House of Representatives in 2016, as part of more comprehensive reform of the US tax system.[12]

The Trump administration dismissed these proposals, initially at least, as too complicated and seemed rather to base its views on the need to correct for differences in corporate tax rates that penalise the US. It also, mistakenly, argues that foreign countries that impose indirect taxes (such as VAT) tax US exports and subsidise their own exports by rebating VAT on exports.

The administration's approach fundamentally misunderstands the way in which indirect taxes operate. They are imposed on both domestic products and imports equally; indeed it is a violation of basic WTO rules to impose discriminatory indirect taxes on imports. Countries that impose indirect taxes rebate these on exports – but that is only because these exports can then be subjected to any indirect taxes in the export market. This system of imposing indirect taxes on incoming imports and rebating VAT on outgoing exports to ensure that indirect taxes remain trade neutral is what are known as border adjustments.

The Trump administration's approach fundamentally misunderstands the way in which indirect taxes operate

The US does not impose indirect taxes such as VAT, but argues that a similar set of adjustments should be available for corporate taxes. No allowance is made for border adjustments for direct taxes, since those are, with justification, viewed as having less precise effects on pricing decisions in markets. Should the US persist with the idea, it would almost certainly invite legal claims before the WTO, again raising the perspective of retaliation and trade wars.

By contrast, the proposals by the House Republicans would in theory be trade neutral. Switching from taxing goods on the basis of their place of production to taxing them on the basis of place of consumption should lead to an appreciation of the dollar (or an increase in the domestic price level) leaving imports and domestic goods on the same footing as they were, and leaving the price of US exports in foreign markets unchanged. There may still, however, be concerns as to whether the proposals entail de facto discrimination against imports because, under the proposals, the latter are taxed at full value whereas US firms producing for domestic markets can deduct certain expenses. There are also likely to be concerns that exempting export revenue from tax violates WTO prohibitions on subsidies contingent on export performance.[13]

[12] Specifically, the proposals by the Republican Party in the House of Representatives aim at moving the tax system away from taxing goods and services on the basis of their origin i.e. where they are produced, to taxing them on the basis of their destination i.e. where they are consumed. This is how taxes such as VAT operate. The US proposes to apply the principles to direct taxation. Under the proposals, all goods consumed domestically (whether they are imports or domestically produced goods) would be subject to tax in the US, though US firms would be able to deduct certain expenses. Income from US firms' exports would not be taxed.

[13] In a case brought by the EU, a WTO dispute settlement panel and, subsequently, the WTO's Appellate Body, ruled against provisions of the Foreign Sales Corporation Act (and successors), that granted tax exemptions to income

Should the administration persevere with its cruder approach to border adjustments, it is possible that, aside from taking action in the WTO, trade partners (notably the EU) could revive the idea of imposing border adjustments to compensate for differences in greenhouse gas emissions pricing across countries. The legal standing of such an approach is uncertain, notably given the difficulty of measuring embodied emissions in products from different sources. But its legal (and economic) standing is more grounded than the proposals made by the US administration regarding adjustments for corporate tax differentials. At any rate, such a proposal could possibly act both as a deterrent to the US and a means of enforcing compliance with climate change obligations.

Jokers wild, no trumps

While there may be legitimate concerns about the distributional impacts of trade, and specifically the impact of global supply chains, the trade policy proposals put forward do not constitute a suitable response to them. Rather, they appear arbitrarily and unjustifiably to target certain partners. More pointedly, they are liable to be counterproductive from the perspective of the US' own self-interest. It might be that the administration is less concerned by overall, economy-wide impacts and more narrowly concerned with manufacturing activities in certain regions because of the political payoffs. But even from this very narrow perspective, trade restrictions are undesirable because they are likely to be self-defeating. And last but not least, trade restrictions they are liable to create a host of deleterious systemic effects that adversely impact on international trade and the global economy.

from export sales. In particular, the Appellate Body ruled against the US argument that its approach mirrored the EU's (and others) approach of rebating VAT; and also ruled that the US approach violated specific rules prohibiting the exemption of direct taxes contingent on export performance (Appellate Body Report WT/DS108/AB/R of 24 February 2000). Whether the findings apply *pari passu* to current proposals cannot be fully assessed until the full legislative details of the proposal are released.

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