4. International trade since the Washington Consensus: the gains and the pains

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Controversy has always swirled around 'trade liberalisation' – and perhaps more so than for any other policy on Williamson's original Washington Consensus list. Anti-globalisation protests in the 1990s and early 2000s sharpened scepticism of the idea that developing countries could reliably grow if they opened their markets to foreign imports. And two decades later, globalisation remains as divisive as ever. This chapter discusses accumulating evidence that liberalising a nation's international trade gives rise to substantial aggregate gains and yet also substantial costs of adjustment and displacement. However, the trade-off involved is no different from any other policy change that strives to raise aggregate efficiency. While there are no easy options for policymakers who must balance the gains and pains from trade, lessons from recent research offer tentative recommendations for policymakers who are evaluating the prospects of trade liberalisation and seeking to resolve the tension between aggregate gains and concentrated losses.

I. Introduction

When John Williamson coined the term 'Washington Consensus' over 30 years ago, one imagines that policy prescriptions related to 'trade liberalisation' may have flown particularly freely from his pen. But controversy has always swirled around this particular policy – perhaps more so than any other on Williamson's list. Anti-globalisation protests in the 1990s and early 2000s sharpened scepticism of the idea that developing countries could reliably grow if they opened their markets to foreign imports. And two decades later, globalisation remains as divisive as ever.

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Yet, this time there's a vital difference. While many developing countries now embrace trade openness with unprecedented enthusiasm, the centre of gravity for resistance to globalisation has moved to some of the world's richest countries – and to the very heart of their politics. What are we to make of these evolving debates?

Taking the research on globalisation and its consequences since the Washington Consensus was laid out in 1989, two main themes emerge.

First, recent studies have shown that, for most countries and in most circumstances, the aggregate efficiency gains from being open to foreign trade are substantial. The 'aggregate' concept to which this research refers can be thought of as the total amount of consumption a nation can enjoy, without considering the distribution of these goods and services. While it is challenging to quantify the aggregate effects of trade, I believe that we can be more confident than ever in the broad view invoked in the Washington Consensus: that trade openness raises aggregate living standards. In fact, given changes to the global economy since 1989, the size of the aggregate gains available to most countries may also be greater than ever. And so – setting aside the potentially uneven distribution of the costs and benefits of globalisation – both evolving evidence and evolving fundamentals suggest that good policy should, most of the time, favour liberal trade.

But the second key lesson from recent research highlights the naïveté of the previous paragraph: the uneven effects of globalisation cannot be ignored. Changes in the size and composition of trade flows have markedly unequal effects on earnings across individuals. This was never in dispute: for example, 80 years ago the Stolper–Samuelson theorem described how income inequality in industrialised countries would rise as a result of trade with developing ones, and even as the Washington Consensus took root some researchers drew important attention to the potentially unequal outcomes of globalisation.[1] But recent empirical work has shown just how unequal these effects can be – and how they can show up in ways that may have surprised economists from Stolper and Samuelson to those behind the Consensus in 1989.

Take the expectation that any unequal effects would be dissipated by, for example, workers changing firms, regions or occupations: research now routinely documents just how slow, costly, and incomplete this adjustment process can be. Or the belief that unequal effects on earnings would not pass through to consumption, thanks to the taxes and transfers that hold up an effective social safety net: in the few places where researchers have been able to look, the effects of trade shocks on earnings before and after redistribution look similar, implying that the social safety net is far from perfect. What's more, the social consequences of these unequal effects may be even larger than thought in 1989. Recent evidence suggests the presence of a 'social multiplier' of economic distress: that when harm is concentrated in one community, it can have even more destructive consequences.

The upshot of these two themes – aggregate gains and concentrated pains – is that countries considering a more liberal approach to trade will have to

evaluate how the consequences will be distributed across society, both in terms of the transition to a more open economy, and the possibility that the volatility of underlying labour demand shocks will be worse once the economy is more open. But I discuss a set of guidelines below.

One key point about unequal effects of globalisation, however, must be emphasised. Recent evidence tells us that the costs and benefits of economic change are borne unequally – especially when it occurs quickly and is clustered within communities. But the same is true of all economic change. It is hard to imagine any element of the Washington Consensus, which was focused on aggregate efficiency rather than inequality, that is immune to the updated caveats described here.

My discussion proceeds as follows. The first section describes our understanding of the magnitude of the aggregate gains from trade, as well as how trade can be facilitated by policy levers beyond mere liberal tariff policy. The next section outlines how trade transitions, such as the sorts of expansions in openness that we expect to produce aggregate gains, come with large transition costs of adjustment. And the final section provides tentative recommendations for policymakers who are evaluating the prospects of trade liberalisation, and seeking to resolve the tension between aggregate gains and concentrated losses.

II. The aggregate gains from international trade

Three strands of evidence from recent research have bolstered the belief that aggregate benefits from trade are likely to be large.

The first involves studies of natural experiments resulting from external shocks that temporarily reshaped countries' openness to trade.

The closing of the Suez Canal between 1967 and 1975 created one such experiment.[2] Suddenly, the shortest distance of sea-based travel between some pairs of countries rose considerably, whereas that between others was not affected at all. This means that, due to their position on the globe, countries were differentially exposed to the Suez closure, with some countries, like India, suffering from a lengthening of many of their important trading routes and others, like Japan, escaping relatively unscathed. The more affected a country was, the greater the reduction in its trade – but this effect reverted once the canal reopened. Similarly, gross domestic product (GDP) per capita in those countries also fell substantially – and reverted to trend upon the canal's reopening. Putting these two findings together, with the plausible assumption that the Suez closure had no other direct effects on GDP per capita beyond changes in trade flows, one study found the sensitivity of real GDP per capita to changes in trade openness to be very large, with an elasticity of per-capita income to trade flows of at least 0.25. This means that every 10% increase in trade openness corresponds to a 2.5% change in per capita income.

Other research has pursued a similar line of inquiry based on the growth of air shipping throughout the second half of the 20th century, which affected

countries differently due to their positions on the globe.[3] In this case, the implied effect of trade on aggregate efficiency was many times larger than was found in the Suez study – though this may reflect the effect of air exposure on economic mechanisms beyond those working through trade, such as foreign investment.

The second strand of evidence that has emerged is the accumulation of theoretical and econometric understanding of the 'standard' model of international trade.[4] The basic idea is quite simple. It involves a model economy with broad sectors of production across which there is little ability for consumers to substitute. Within each sector the inputs, beyond primary factors like labour and capital, involve goods made in other sectors, often with little ability for producers to substitute across such inputs, both primary and produced. Finally, when it comes to sourcing the different versions of products produced within each sector, whether for final consumption or for intermediate production use, buyers in the model can only substitute imperfectly across the versions produced domestically relative to those available from abroad. This imperfect domestic–foreign substitutability gives rise to aggregate gains from trade.

Such product differentiation can arise for many reasons. One could argue that it derives from comparative productivity differences, adjusted for wages, among supplying locations around the world. Or it could be that firms, both at home and abroad, make investments in product differentiation, and as a result produce different goods. Either way, at an aggregate level, the result is that when a country buys goods, the domestic versions usually appear to be imperfect substitutes for foreign versions – and empirical estimates do suggest that the implied rate of this substitutability is relatively low. This means that the aggregate gains from trade openness can be large, particularly for small countries that have fewer domestic substitutes for the large set of input suppliers that exist abroad. According to one estimate, a moderately open country, such as Canada, would experience a drop in per capita income of 30–40% if it were to prohibit international trade, whereas for a more closed country like Australia this number is in the 7–16% range.[5] On the other hand, if Australia were as open as Canada – a fanciful thought, perhaps, but also not beyond the realm of possibility with the growth of nearby Asian partners and the rise of services trade – it is possible that it would enjoy substantial gains from the rise in openness.

The third strand of evidence one could point to is more circumstantial, but it still deserves to be taken seriously. It is simply the case – just as it was at the time of the Washington Consensus – that it is hard to find examples of countries that have grown dramatically without being open to foreign trade. Just as an earlier generation would point to the East Asian 'miracle' countries of Hong Kong, Japan, Malaysia, Singapore, South Korea, and Taiwan, an updated list of countries where surges in living standards seem plausibly related to international trade could include Bangladesh, Botswana, Chile, the Dominican Republic, Panama, Peru, Thailand, and Vietnam – and perhaps China and India as well.

Beyond the preceding discussion of evidence, it seems likely that the fundamentals of the global economy have evolved in a way that has only increased the potential gains from trade. For example, improvements in communication technologies have expanded the scope for international outsourcing, trade in services and goods, and the modern web of international supply chains that we now take for granted. Equally, expansions of foreign direct investment have girded the set of arrangements under which goods can be produced far from where they are consumed.

For all of these reasons, I believe that the empirical and theoretical argument supporting large aggregate gains from international trade is in fact stronger today than it was at the time of the Washington Consensus.

1. *How to promote trade*

The Washington Consensus focused on reducing impediments to imports via the reduction of import tariffs and the removal of quantitative restrictions. But recent research has established how tariffs and quotas may comprise only a small subset of the reasons that trade is inhibited. In this sense, a modern prescription for liberal trade can appeal to a wider vision of open trade policy than was emphasised in the Washington Consensus.

On the importing side, red tape, slow processing, insufficient port capacity, slow highways and railroads, and even blatant corruption at border crossings and ports, can all be severe impediments to the free flow of trade, much like explicit taxes and quotas. And many of these same features apply symmetrically to the export side. More export-specific policies, on the other hand, include export processing zones, special economic zones, export banks, trade fairs, and economic diplomacy. The science of evaluating such policies – comparing the trade efficiency bang to the administrative buck – is still in its infancy, but in many settings the net social gains from overcoming obstacles to the movement of goods appear to be positive.

Another broad lesson concerns the nature of such impediments. While tariffs are usually an explicitly variable tax, per-unit quantity or value, increasing evidence points towards a fixed cost of exporting or importing that inherently derives from non-tariff considerations. Around the world there is a striking tendency for large firms to do much more international trading than small firms, which indicates the presence of economies of scale in exporting activities.

Other recent evidence clarifies just how much international trade takes place within the borders of multinational firms.[6] This suggests the presence of synergies between a nation's trade policy and its openness to foreign direct investment. It stands to reason that multinationals may be unwilling to locate in countries where their access to foreign goods and services is costly – especially when those are sourced from within the firm itself. The country that wants to attract foreign investment may find that it must allow free trade in the types of goods and services that are complements for those investments.

2. *Managed trade*

Many of the examples of export-led growth referred to above – such as Japan, Taiwan, or Korea – invoke images of countries that adroitly 'manage' their trade by selectively promoting sectors. By contrast, the Washington Consensus on trade policy explicitly advocated for both low and uniform tariffs. If the goal of trade policy is only to enhance aggregate efficiency, then arguments for strategically managed trade must rest on the presence of market failures. Important examples include environmental externalities, knowledge spillovers in production and innovation, and market power. In the absence of such market failures, aggregate efficiency – and hence per-capita income – will only fall if policies attempt to enlarge favoured sectors at the expense of others.

While domestic market failures surely exist, it is important to recognise that, in principle, the best way to address such problems is domestic policy, not trade policy. In most cases, it would be surprising if the best way to grow an industry were anything other than industrial policy targeted at that industry. While it is possible that pragmatic constraints on policy choices could mean trade policy is after all the best way to correct a domestic market failure, it is hard to imagine that this would generally be the case. Strategies for measuring market failures and designing policies to correct them, ideally in ways that can resist capture by special interest groups, are discussed in other chapters of this volume.

III. The concentrated losses – and painful adjustments – of international trade

It was once held plausible that most workers in a modern economy were endowed with relatively general and malleable skills, capable of retraining in a matter of years. Likewise, that these same workers would be willing and able to uproot themselves and move elsewhere in search of work. Put together, it seemed that 'exposure' to any economic change, such as the liberalisation of a country's international trade policy, would differ in accordance with broad skill groups, but not a worker's occupation, firm of employment, or location of residence.

Recent research has highlighted just how simplistic this 'broad skill groups' view appears to have been. There is by now a great deal of evidence showing that many factors of production, and especially workers, provide services that are extremely specific to their current economic activities, taken to mean the mixture of occupation, industry, region, or even firm at which they are employed.

Such findings can still be interpreted in a skills-based framework, since one can always define a worker's skills as those that are tailored to their current occupation-industry-region-firm match. But the result is a 'hyper-specific' factors model with a plethora of workers possessing different types of skills,

each to be affected by trade in myriad directions. That said, it may still be useful to imagine a long-run version of such a model in which workers of the same broad skill group are able to transition from one sector, occupation, firm, and/or region to another. But then the crucial question becomes an empirical one: how costly and long-lived is this adjustment process?

To summarise the answers to this question, it helps to start with the 'job displacement' literature in labour economics. Studies of this sort isolate cases in which a worker-firm match ends, for reasons plausibly unrelated to the productivity of the worker in question. Mass lay-off events are a classic example. Numerous scholars have documented the recurring pattern that, on average, when a worker loses their job in such a manner, the resulting reduction in earnings is extremely large – not just in the immediate sense, but for years to come.[7] Earnings are not only lost while unemployed or out of the labour force, but also upon re-employment, which suggests that the typical job found by a displaced worker is one that is less suited to their skills or circumstances.

The mass lay-off events that drive estimates in the job displacement literature need not have anything to do with international trade. But a recent body of differential exposure studies does estimate effects of import competition on worker earnings that appear consistent with the wider displacement literature.[8] For example, one prominent study followed all US workers employed in manufacturing in 1992 and ranked them according to the extent to which their 1992 industry of employment would go on to see an increase in imports from China over the coming decades. According to such a ranking, researchers can follow the earnings trajectory of two workers: one at a high amount (say, the 75th percentile) of such exposure to import competition and one at a comparatively low amount (say, the 25th percentile). Even though these two workers saw a similar path of earnings prior to 1992, their fortunes subsequently diverged. By 2007 the total accumulated earnings of the highly exposed worker were, on average, lower than that of the less exposed worker by about half of one year's salary.

Findings like these are striking. But they need to be interpreted with care. For one, these studies use theoretical reasoning to differentiate types of workers according to their exposure to trade events, and such reasoning often considers only a subset of mechanisms through which trade events can affect people. This is a necessary and deliberate aspect of the study's research design, since exposure is itself a concept that is guided by the researcher's theory and prior beliefs, but it inevitably shapes what we learn from the evidence.

One way to see this is to consider four simple mechanisms by which a tariff reduction affects individuals in any economy. The first and the focus of the aforementioned studies involves import competition: that a worker in a given sector is likely to suffer reduced earnings or employment when their country imports more goods in that sector. However, an equally important second mechanism involves exports. Most countries find that their trade balance – the difference between its total imports and total exports – does not respond to a change in its tariffs, especially over relatively long-run time horizons, such

as a few years. So, there can be no such thing as an event that permanently raises imports without raising exports too. Whenever we find workers who are competing with newly imported goods, there must be other workers who are enjoying a commensurate export boom of approximately equal size, and even countries that do see growing trade imbalances must be experiencing capital inflows that create an investment boom that may have similar effects. A third mechanism returns to the importing side of the ledger but observes that many firms themselves use imported goods as productive inputs via global supply chains. In this case the effect on workers is ambiguous, depending on whether the worker is a complement or a substitute for the imported goods. Finally, a fourth way that trade affects workers looks beyond their role in production and to their role as consumers. We expect that greater availability of foreign goods will reduce prices, giving purchasing power benefits to all workers, regardless of whether their nominal earnings are helped or harmed by trade.

Quantifying, combining, and disentangling these four mechanisms is challenging, not just because of the data required, but also because not all researchers will agree on the right way to define a given individual's exposure to any given channel. Adding to the challenge is the fact that our discussion of these mechanisms has so far only covered so-called direct versions of these phenomena. Indirect versions can also percolate through the domestic economy and easily affect workers in seemingly immune sectors, including those in non-traded activities.[9] To illustrate this, consider three law firms that each exclusively work for three types of domestic clients: import-competing firms, export-oriented firms, and input-importing firms. These law firms do not directly trade anything, but the lawyers who work in them could be just as exposed, indirectly, to the mechanisms of trade as are the workers of their clients. Such indirect effects are dauntingly complex in a modern economy – and even if we could penetrate that complexity, the resulting differences in worker exposure may be so slight that we would struggle to pick them up with differential exposure designs. Nonetheless, many small indirect effects of this kind are very likely to add up to something larger.

Another reason to interpret such findings from differential exposure studies with caution is that these studies are deliberately designed around the goal of providing convincing estimates of relative effects, not aggregate effects. This means that any mechanism that affects all workers equally will go unmeasured. For example, suppose that all workers consume goods according to similar budget shares. In such a case it would be impossible to use differential exposure designs to estimate the consumer price benefits of trade since there is no way to find a non-exposed worker to use as a reference point of 'zero' around which the effects on others can be benchmarked. Indeed, it is typically found that workers who are relatively exposed to greater import competition experienced a reduction in their earnings relative to the earnings of other workers. But this cannot be interpreted as evidence of import penetration actually harming the former group of workers. It is entirely possible that imports caused the earnings (especially the real earnings, incorporating

consumption price effects) of both types of workers to rise, implying that no one experienced any actual harm in an absolute sense.

Given these reasons for caution, it is not at all clear how one could use such differential exposure studies to quantify the aggregate effects of trade. But that concern need not trouble us here. The previous section summarised the case for the aggregate effects of trade, appealing to a different sort of evidence that was aggregate in nature, by design. Instead, what studies of differential exposure do illuminate is a sense of just how costly it may be to adapt to shocks, such as an increase in international trade.

Why is this the case? Suppose that two workers have similar skills and live in the same location, but we initially observe them working in different sectors. The economy then opens up to international trade, with imports flooding into one of the two sectors, resulting in a contraction in this import-competing sector. If it were costless for workers to move across the two sectors then we would never see a differential effect on the two workers' earnings – their differential exposure based on initial sectors would be irrelevant because no mobility costs tie them down to such initial conditions. By contrast, if adjustment is costly then we would see differential effects. Going further, if adjustment were costly for two years and free thereafter then we would see differential earnings that follow this same pattern: large for two years and zero thereafter. Seen in this light, the fact that differential exposure studies find such large relative effects, and often for several decades, implies that adjustment costs must be large, even on multi-decadal time horizons.

One point that often gets lost in discussions of this theme is that adjustment costs are, clearly, all about change. That is, whatever weight one attaches to the importance of such costs, that weight should be applied symmetrically to views about both liberalising and hindering trade. The broad push towards greater openness ensconced in the Washington Consensus will have costs of adjustment that are unequally borne, but the same would be true if one considered any other change in the tariff code, such as a move to enhanced protectionism. Adjustment costs speak in favour of maintaining the status quo, not against any particular direction of change.

In the presence of adjustment costs, any changes in a nation's trade policy are likely to produce both winners and losers, especially in relative terms. This is not a surprising statement for those who are used to thinking about international trade. But it is important to remember that the identities of the relatively helped and harmed are unlikely to map neatly onto standard notions of inequality. For example, in a model with exposure based on broad skill groups, we know that if low-human capital workers are those relatively harmed by a shock then income inequality will go up. But when the unequal effects of trade instead play out along dimensions such as workers' firms, occupations, regions or sectors, we lose the ability to make easy connections to income inequality. On the other hand, if social evaluations of inequality are based on changes rather than levels, then concentrated losses caused by trade reforms may be considered harmful regardless of what they do to the shape of the income distribution.

IV. Does policy help with the costs of adjustment? Does it need to do?

The above discussion described earnings effects that are measured at the 'factory gate'. But one might imagine the idyllic extreme in which social policies serve to ensure that workers' earnings are decoupled from the vagaries of their pre-tax and transfer earnings.

There is surely no country that comes close to this level of protection against negative shocks and, equally, in which unexpectedly positive earnings are completely taxed away. Obvious factors, grounded in asymmetric information, place severe limits on the feasibility of such social insurance schemes. But it remains an important empirical question to ask just how far the average worker is from the full insurance limit when it comes to the consequences of trade liberalisation.

This has been studied in the context of the US response to the expansion of imported goods from China.[10] Despite the existence of the Trade Adjustment Assistance programme, which aims to help workers displaced by shocks from international trade, and other forms of redistributive assistance, such as tax policy and unemployment insurance, research has found that the estimated effects of the import shock on post-redistribution earnings are very similar to those on pre-redistribution earnings. At least in this particular context, there is clearly not much trade-adjustment redistribution happening in practice.

In the absence of social insurance, perhaps individuals' self-insurance – whether due to formal insurance schemes, the ability to borrow and save, or the help of friends and family – would mean that shocks to even post-redistribution incomes have little bearing on consumption. Data limitations make it especially challenging to quantify the pass-through of trade shocks to consumption. But it stands to reason that we would not see the sort of social harm from job loss described below in a world of complete formal and/or informal insurance.

A final consideration about private insurance mechanisms concerns the speed of adjustment being asked of households and their social networks in response to a given policy change. With real-world constraints on access to insurance and credit markets, households would be able to cope with a stream of small shocks better than a sudden and large one. Following this logic, researchers have derived the optimal rate of gradualism for a given policy reform as a function of the extent to which borrowing limits depend on borrowers' collateral and how unevenly wealth is distributed throughout the economy.[11] What is unclear, however, is the extent to which smooth policy changes actually translate into smooth household-level shocks. Even if at the macro level sectoral shrinkage driven by trade liberalisation happens slowly, if this change evolves one lay-off or factory closure at a time then at the micro level, the insult to any individual household may be sudden and large.

1. *Aggregate features of adjustment to shocks*

Another strand of research evaluates the extent to which a given worker's experience in response to a job loss is altered when others around them are also subject to the same, or related, economic turmoil. In the job displacement literature, researchers have found the total earnings lost after one's own job loss is considerably worse in a recession than in a boom – especially in the first few years after the separation, and especially for older workers.[12] This may reflect the fact that other, similar workers are also searching for re-employment, as well as a period of diminished investment by firms. Similar findings have emerged from research into Finland's experience with the collapse of its Soviet-era trading arrangements in the early 1990s.[13] Workers who were employed at plants that sold a large share of their output to the Soviet Union in 1989 suffered, on average, a substantial reduction in their relative earnings throughout the 1990s. But this effect was both considerably worse in locations where a large share of other plants were affected and also borne, albeit to a lesser degree, by workers in such locations who did not even work at one of the plants. In other words, the estimated earnings damage done, per worker, appeared to increase with the number of affected workers.

2. *Social externalities*

A final area of evidence about adjustments to trade shocks documents a set of consequences beyond earnings losses. These include the effects of relatively greater Chinese import competition on mortality rates – notably, from drug overdoses – in US localities, as well as impacts on marriage rates, fertility, and children's living circumstances.[14] In the case of Brazil's trade liberalisation, crime rates were found to rise in places more exposed to import competition.[15] Such findings highlight the social externalities that are likely to be associated with job displacement and diminished labour market prospects caused by the import competition side of trade liberalisation. However, it is possible that the export-expansion side of trade liberalisation is accompanied by analogous positive externalities – such as falling crime rates in booming regions.

V. Policy recommendations

The discussion so far can be summarised in two simple statements: first, that permitting liberal international trade is likely to engender substantial aggregate efficiency gains; and second, that changing openness to trade is likely to cause substantial adjustment costs for some workers.

Before examining the policy implications of these statements, it is important to recognise that they could be applied just as accurately to a wide range of economic policy areas, especially those covered by the Washington Consensus. This means that, in most settings, it would be incoherent to cite adverse distributional consequences of adjustment, such as the large costs

of job displacement, as a reason to forego or even slow trade liberalisation while simultaneously failing to apply the same prudence to other areas such as monetary, fiscal, competition, or environmental policy.

Nonetheless, recent research suggests the following approach as a guide for policymakers:

1. Embrace the broad principle of openness to trade, because the aggregate efficiency gains from doing so are likely to be large, especially when beginning from a point of high trade barriers. Trade openness can be enhanced, on both the import and export sides, via the traditional means of reducing import tariffs and quantitative restrictions. But technical barriers, customs bureaucracy and corruption, inadequate ports and domestic transport facilities, should also be evaluated.
2. Given a proposed set of policies to boost trade, assess the relative winners and losers that are likely to result. This involves the four mechanisms previously described: (i) import competition, which displaces factor demand; (ii) export engagement, which augments it; (iii) imported inputs into production, which can either displace or augment factor demand to the extent that the inputs are substitutes or complements for the factors in question; and (iv) cheaper prices for imported consumer goods, which should broadly benefit all factors. Further, such an assessment must incorporate the indirect versions of these mechanisms. For example, the workers of firms whose clients are in an import-competing sector may be just as exposed as workers in the import-competing sector itself, even if this exposure is less apparent.[16]
3. Assess the pre-redistribution earnings consequences of a typical job displacement event in the country of interest. If the consequences of factor demand displacement are expected to be borne most heavily by those who lose their jobs and have to transition to new ones, a crucial consideration concerns how long this transition will typically take, as well as the size of any long-run drop in earnings upon re-employment. This may depend on features such as labour market policies and the costs of geographic mobility.[17]
4. Assess the extent to which these pre-redistribution earnings effects pass through into post-redistribution earnings and consumption in the setting of interest. The degree of such pass-through depends on the social safety net, and in particular those policies relevant to the types of relatively long-lived and secular displacement shocks that come with expanding trade. In low-income settings, informal safety nets may be important to assess as well.
5. Assess the extent to which job displacement shocks are likely to involve large 'multipliers' in the setting of interest. This occurs when shocks

that are particularly concentrated – in space, sectors, occupations or firms – have worse effects than those that are spread out.

6. Assess the risk that job displacement, especially when it causes costly consumption losses and is particularly concentrated, creates deleterious social costs such as crime or political unrest.
7. When the costs identified in the previous three points are particularly high, trade liberalisation is likely to come with severe disruption, borne unevenly by the population. In such a case, search for ways to reduce the costs of transition. One strategy is to enhance social safety nets, retraining programmes, and the like, particularly in the places where job displacement is likely to be felt. A second strategy would be to modify the trade liberalisation plan to limit such losses by design – that is, by tailoring it *ex ante* to avoid introducing a constellation of shocks that, for example, due to the presence of multipliers may be particularly harmful.

VI. Concluding remarks

Like so many efficiency-enhancing policies, liberalising a nation's international trade gives rise to substantial aggregate gains and yet also substantial costs of adjustment and displacement. Such choices often prove controversial. While there are no easy options for policymakers who confront this trade-off, lessons from recent research, as described in this chapter, have highlighted the types of events and settings that may be particularly costly. This should empower policymakers to evaluate and implement the types of aggregate efficiency-improving reforms at the heart of the Washington Consensus better than they were able to in 1989.

In this regard, trade liberalisation displays many similarities to the other items on John Williamson's list. However, a distinct feature of trade legislation is that it can be targeted in unusually detailed respects. For example, most countries can, and typically do, set different tariffs and non-tariff measures on thousands of unique products, and then further tailor these tariffs to specific trading partners through the use of trade agreements, as well as anti-dumping and countervailing duties. In contrast, other policy areas are inherently difficult to target, such as monetary policy, or are typically applied with broad brushstrokes in practice, such as those in fiscal or environmental domains. In principle, the freedom to engage in the hyper-targeting permitted by trade policy is no bad thing. But in reality, one does not have to look far to find examples of the abuse of such discretion in the favour of special interest groups who lobby most successfully for policy advantages that harm society as a whole. Policymakers need courage to resist such pressures and the Washington Consensus serves as a reminder that the aggregate dividends afforded by trade openness are worth fighting for.

Notes

[1] Rodrik (1997); Wood (1995).

[2] Feyrer (2021).

[3] Feyrer (2019).

[4] For a summary of the state of this art see, for example, the survey by Costinot and Rodríguez-Clare (2014).

[5] Costinot and Rodríguez-Clare (2014).

[6] Antras et al. (2024).

[7] Jacobson et al. (1993).

[8] Examples include Topalova (2010) on India; Autor et al. (2013), Autor et al. (2014), and Pierce and Schott (2016) on the United States; and Dix-Carneiro and Kovak (2017) on Brazil.

[9] Adao et al. (2022).

[10] Autor et al. (2013).

[11] Beraja and Zorzi (2023).

[12] Davis and von Wachter (2011).

[13] Costinot et al. (2022).

[14] Autor et al. (2019); Pierce and Schott (2020).

[15] Dix-Carneiro et al. (2018).

[16] The methods in Adao et al. (2022) can be used to conduct such an assessment.

[17] The methods in Bertheau et al. (2023) provide guidance on how such an assessment can be done, and this study's specific findings may potentially inform other contexts.

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Response to Dave Donaldson by Thomas Sampson

The three decades since John Williamson proposed the Washington Consensus have seen an explosion of empirical research on international trade. Aided by more disaggregated datasets and increased computational power, researchers have shed new light on the causes and consequences of cross-border trade. Dave Donaldson elegantly synthesises the findings of this literature and the ways in which the new evidence does – or does not – require us to re-evaluate the role of trade liberalisation in the Washington Consensus.

Donaldson highlights two main themes. First, under most circumstances there are likely to be substantial aggregate gains from openness to foreign trade. This conclusion is consistent with Williamson's arguments for trade liberalisation, but there is now more evidence to support his position than was available 30 years ago. While the evidence establishes a presumption in favour of openness, it also suggests that the gains from trade are likely to differ across countries. In particular, smaller countries have more to gain because they are more reliant on overseas production and demand. To give one example, Arnaud Costinot and Andrés Rodríguez-Clare estimate that the gains from trade are two to three times greater for the United Kingdom than for the United States.[1] Such differences imply that the stakes at play in trade policy debates vary dramatically across countries.

While Donaldson's first theme reinforces Williamson's position, his second strikes a note absent from the original Washington Consensus. Trade policy not only affects aggregate efficiency, but also has important distributional consequences. That trade can, in theory, affect the distributions of income and consumption has long been known. What has changed since Williamson made his proposal is the steady accretion of evidence documenting distributional effects and establishing that they are often both large and long lasting. Adjustment to trade liberalisation is frequently slow and costly with the costs primarily borne by those – be they workers, firms, industries, or regions – that find themselves unable to compete with foreign production. In principle, the state could compensate these losers and support them in transitioning to new activities. In practice, any support provided is generally insufficient to meet their needs.

Thus, Donaldson concludes that while policymakers should continue to seek ways to promote trade openness, they should also pay greater attention to the distributional consequences of proposed reforms and attempt to ensure losses are sectorally and spatially dispersed. How policies can best be

designed to reap the benefits of trade openness while minimising adjustment and distributional costs is a question that researchers are only now starting to grapple with, particularly when it comes to addressing social consequences at the level of communities and regions. But, as a starting point, it is worth exploring how policies can be tailored to allow for gradual adjustment, avoid concentrated losses, and provide meaningful support to people, firms, and communities facing the biggest shocks.

However, it is important to remember that the new evidence on the distributional impacts of trade does not provide any rationale for reversing trade liberalisation or for rejecting international cooperation in trade policy formation. For seven decades after World War II governments and international institutions gradually reduced barriers to trade, often through international agreements. The General Agreement on Tariffs and Trade (GATT) proved an effective forum for reducing import tariffs on a multilateral basis, while many countries pursued deeper integration with their most important trading partners through preferential trade agreements such as the European Union (EU) and the North American Free Trade Agreement. The fall of the Soviet bloc also increased integration as former communist states joined the world trading system.

But in the past decade this trend has been interrupted by a return to nationalism in trade policy, most prominently manifested by Brexit, the collapse of the World Trade Organization's (WTO) dispute settlement system, and the US–China trade war. These developments stem, at least in part, from concerns over the distributional consequences of trade. However, we should not expect them to succeed in addressing such concerns.

One reason they will not succeed is that the costs of adjusting to trade liberalisation arise primarily not from liberalisation itself, but from the necessity of adjustment. Any technology or policy shock that shifts production across occupations, firms, industries, or regions will generate adjustment costs, including shocks that result from increased barriers to trade. As Donaldson nicely puts it: 'Adjustment costs speak in favour of maintaining the status quo, not against any particular direction of change'. Provided we accept that change is inevitable, policy should seek not to prevent change but to dampen and share any costs that change brings. Reversing trade liberalisation simply introduces a new shock for agents to grapple with.

But a more fundamental problem with the protectionist turn in trade policy is that it overlooks Donaldson's first theme: the existence of aggregate gains from trade. Acknowledging these potential gains, the key challenge for policymakers is not to prevent trade shocks, but to identify ways to reduce barriers to trade while minimising adjustment costs. Donaldson's discussion focuses on policies that can be implemented unilaterally – customs capacity, transport infrastructure, export support – all of which are undoubtedly valuable. I would add to this list the importance of participating in and supporting international institutions that promote openness by facilitating trade policy cooperation.

Why is international cooperation important? Trade policy generates cross-border externalities that national policymakers do not internalise. When acting unilaterally countries have incentives to adopt policies that are more protectionist than is globally efficient in order to improve their terms of trade or shift profits across countries. And the protectionist impulse may be further magnified by producers lobbying for import protection. International negotiations provide a forum for countries to reduce inefficient protectionism and make all countries better off by trading market access commitments.[2] Trade policy institutions such as GATT/WTO and regional trade agreements facilitate these negotiations and help avoid mutually destructive trade wars. The recent turn to economic nationalism undermines this system of international cooperation by instead prioritising national control over trade policy.

The economic costs of rejecting internationalism are readily apparent from research on current President Donald Trump's trade policy. Increased tariffs on US imports raised prices paid by US consumers and users of imported intermediate inputs without improving US terms of trade, leaving the US as a whole worse-off.[3] Moreover, retaliatory tariffs imposed by countries including China and the EU reduced US exports and increased prices in these countries. Overall, the evidence shows that the trade war harmed all participants, offering a reminder of why international trade policy institutions were established following the trade wars of the 1930s.

Brexit offers a more nuanced, but no less instructive, case study of the risks of unilateral trade policy. Whereas President Trump's rationale for raising tariffs was avowedly protectionist, many proponents of Brexit argued that it would enhance free trade by allowing the UK to reduce trade barriers with the rest of the world.[4] And since the UK voted to leave the EU in 2016, successive UK governments have framed their trade policy in terms of a 'Global Britain' strategy to promote openness. However, actual policy choices have not delivered on these aspirations. Although the UK has signed new free trade agreements with Australia and New Zealand, it has not secured deals with larger markets, such as the US. More importantly, the government has – despite its stated intentions – repeatedly backed away from unilateral liberalisation.

The debate over the UK's most-favoured nation (MFN) tariffs provides one example of why unilateral liberalisation has proved elusive for Brexit Britain. Upon leaving the EU's customs union, the UK regained control over the MFN tariffs it charges on imports from other WTO members. Initially, the UK proposed a substantial liberalisation that would have increased the share of its MFN imports facing zero tariffs from 52% under the EU's tariff schedule to 96%.[5]

But this proposal ran into two difficulties. First, domestic producers objected to greater import competition and lobbied to maintain existing protection. Second, the proposed tariff schedule reduced the incentive for other countries to strike trade deals with the UK. Canada paused negotiations

on rolling over its existing trade agreement with the EU to cover the UK post-Brexit and linked the pause to the prospect of obtaining tariff-free access to the UK market without needing a trade deal.[6] In the face of these difficulties the UK backtracked and adopted a new schedule much closer to the EU's MFN tariffs. Under the new UK tariff schedule, only 70% of MFN imports face zero tariffs.[7] After the UK announced its less liberal tariff schedule, negotiations with Canada resumed and a rollover deal was eventually reached.

The other weakness of the Global Britain argument for Brexit was that it ignored the costs of raising trade barriers with the EU. And these costs have proved to be substantial. The Brexit vote caused an immediate fall in the value of the pound, which raised import prices and reduced real wages. Uncertainty and the expectation of future increases in trade costs then led to lower investment and slower output growth, leaving the UK economy around 2–3% smaller by the end of 2019 than it otherwise would have been.[8] These costs materialised even before the UK left the EU. And the implementation of the new UK–EU trade relationship at the start of 2021 resulted in further disruption, causing UK imports from the EU to fall by around 20%.[9]

The UK's struggles illustrate that the route to greater openness lies not in unilateralism but through international negotiation and cooperation. A renewed commitment to working together – and to building, or re-building, institutions that facilitate trade liberalisation, while also affording countries the freedom to address any distributional conflicts that further openness may generate – would leave countries better placed to capture the benefits that international trade can bring, and to face future trade policy challenges.

Notes

[1] Costinot and Rodríguez-Clare (2014).

[2] Bagwell and Staiger (1999).

[3] Fajgelbaum and Khandelwal (2022).

[4] Sampson (2017).

[5] Garrett et al. (2020).

[6] Government of Canada (2022).

[7] Garrett et al. (2020).

[8] Dhingra and Sampson (2022).

[9] Freeman et al. (2022).

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Response to Dave Donaldson by Anthony Venables

The real value of world trade has grown by a factor of three since the presentation of the Washington Consensus in 1989, and trade has – until recently – grown faster than income. Openness to international trade is now the norm, with trade an important factor in the extraordinary success in lifting more than a billion people out of extreme poverty since 1989.

Trade liberalisation is one of the recommendations of the Washington Consensus. The intellectual case for trade liberalisation rests on the potential for trade to raise aggregate income – in all participating economies – as production becomes located in line with comparative advantage. The case is subject to three well-known provisos. First, while a country as a whole gains, changes in the distribution of income within a country will create both winners and losers. Second, world efficiency is lost if countries restrict trade to exploit their monopoly or monopsony power in particular goods. Third, trade should not interact adversely with distortions in each country, e.g., leading to expansion of activities with negative externalities. Standard responses to these provisos are, in turn: domestic redistribution and compensation policies can be used to sort out distributional issues; rules of the international trading system can prevent beggar-thy-neighbour tariffs or subsidies; and non-trade distortions are not a trade issue, and so are the business of other policy areas.

Intellectual developments in the years since the Washington Consensus have done much to enrich our understanding of the drivers and effects of international trade. The role played by firms has attracted research, thus giving better understanding of intra-industry trade, increasing returns to scale, and market power. International interactions through trade in global value chains, foreign direct investment in services, and intellectual property have been studied. And there is better understanding of the complex set of factors that shape firms' decisions on where to locate production and how to supply markets. On balance, these developments increase the gains from trade predicted by traditional theory. But none of them suggests that trade will lead to a 'first best' outcome. Each comes with trade-offs (e.g., between economies of scale and monopoly power), and the realisation that achieving gains may require complementary policies, beyond the range (and at variance with the spirit) of the Washington Consensus.

This note focuses on two issues, drawn from what could be a much longer list. The first is the problem of the 'left behind' – those people, and those places, that have not shared in the overall gains from trade, or that have suffered

from trade-related shocks. The second is the issue of global externalities, in particular those created by carbon emissions (negative) and by the creation and transmission of knowledge (positive).

I. The left behind

Openness to trade has been used successfully by some of the fastest growing developing economies and has been an important part of growth accelerations. But other countries have been left behind, not using trade opportunities to develop new and fast growing sectors. Meanwhile, some high-income countries have experienced a different 'left behind' problem as changing patterns of comparative advantage have destroyed jobs in sectors and regions; traditional comparative advantages have been lost, while expanding sectors are based in other regions. Growing regional inequalities are apparent in many countries, creating acute problems in areas of the United Kingdom and the United States. Some of the places hit by negative trade shocks in the 1970s became deprived areas, and remain so 50 years later, stuck in a low-level trap.

Fundamentally, the gains from trade derive from places being able to expand some sectors – those in which they have a comparative advantage – while other sectors contract. The problem is that growing a new sector is harder than the textbook models of comparative advantage suggest. While every place has a comparative advantage in something, by definition, what that something is depends on policy. The simple idea that markets will lead to an efficient outcome is often incorrect. We see this where negative trade shocks have left places in a low-level trap, persistent across multiple generations, and in those countries that have failed to establish new industries that are internationally competitive. These issues are well known, and have been studied under labels such as the infant industry argument, self-discovery, and coordination failure. They are particularly acute for relatively complex sectors that require institutional, technical and knowledge support from the rest of the economy. These are the high-value sectors (with relatively high value added per worker), and failure to grow them results in specialisation in relatively low-value service or resource-based activities.

Which policy responses can address this problem? Some are uncontroversial. Developing countries need the institutions, skills, and infrastructure to create a good business environment that makes them attractive for firms – including those in export sectors – to invest in. Government support for these 'general purpose' investments is widely accepted, but has often proved hard to deliver.

In high-income countries the response to job losses has often relied on workers acquiring – possibly with government support – new skills to ready them for jobs in new sectors. This too is uncontroversial, but encounters two problems. One is that the support has often not been delivered effectively or at sufficient scale, and the other is that skills alone are not sufficient to attract new sectors. 'Social multiplier' effects occur, as negative shocks

trigger a vicious cycle with out-migration (principally of the young and more skilled), declining land values, shrinking local business ecosystems, and less ambitious youth aspirations. To escape – or better, to pre-empt – this low-level equilibrium a comprehensive package of 'place-based' policies may be needed. These need to involve both labour supply – the training and skill development polices traditionally suggested – and labour demand, through active policy to support lagging areas and attract investment.

In each of these cases – a developing country making the most of trade openness, or a lagging region redefining its comparative advantage – active industrial policy has a role to play. The difficulties of successfully implementing such policies are well understood, but recent work re-evaluates the possibilities and means of successful intervention.[1] Essentially, the structural changes required to make the most of trade opportunities, and to adjust to trade shocks, often require systematic policy intervention using a wider range of instruments than was envisaged in the Washington Consensus.

II. Global externalities: climate and technology

Climate change is a market failure on a global scale, of an importance that means it should top any list of policy priorities. Carbon emissions are shaped by the structure of production, and the technologies that are used, in countries around the world. These are inherently trade issues. What is an efficient pattern of production and consequent trade in goods and services, taking into account impacts on climate? How should climate imperatives change our thinking about trade-related policy? There are two broad issues here. One is to do with the pricing of carbon (and other greenhouse gases) to secure a pattern of trade that is consistent with comparative advantage but inclusive of carbon emissions in production. The second – and more important – is to do with the development and diffusion of new and greener technologies.

The first of these is conceptually straightforward, although practically difficult. For efficiency, the carbon price needs to be the same in all countries; failing this, the second best policy is a carbon border adjustment mechanism (CBAM), i.e., an import tariff that corrects the differential at the border, such that local producers are not undercut (in their domestic market, at least) by more carbon-intense foreign competition. The practical difficulty is that implementation of this policy requires knowledge of the carbon intensity of imports. Supplying this information places a considerable burden on foreign exporters and will therefore have a 'trade-chilling' effect, reducing trade beyond what is intended. Experience gained as the EU's CBAM comes into operation will be instructive.

The second issue is to ensure that the trading system supports the rapid development of green technologies, and their widespread application. Development of these technologies involves the classic market failures of increasing returns to scale and learning-by-doing, as well as coordination failure (where one element of a new technology becomes viable only when

other complementary elements are in place). As such, the market will undersupply innovation, meaning efficiency requires policy support, e.g., to accelerate movement down the learning curve, as we have seen most spectacularly in the development of solar panels. Securing rapid adoption means open trade, competitive (marginal) cost pricing, and widespread diffusion of intellectual property.

These features are desirable from the standpoints of both climate and economic efficiency. However, a corollary of steep learning curves and government support is the likelihood that one country comes to dominate supply, while other countries (or firms) that are slower to secure cost reductions are outcompeted by imports. The prices of these imports may be greater than marginal cost, but are likely to be well below some (ill-defined) measure of long-run average cost. The tensions here are between the urgency of promoting technical change; the role of government support in achieving this; and the market dominance and ensuing trade patterns associated with increasing returns and learning-by-doing. These features do not fit well with current trade rules, with the political economy of importing countries, or with the need for resilience against supply shocks.

The issues pose numerous questions. How are safeguards and other elements of contingent protection to be handled? Is an import surge of cheap green products to be welcomed or restricted? Should there be rules on state aids and subsidies? Is a policy that accelerates the development and adoption of green technologies, but needs protectionist elements to make it politically feasible, to be welcomed or restricted by trade rules?

III. Concluding remarks

The principles of free trade in goods and services promoted in the Washington Consensus have delivered prosperity to many and remain sound guidance. The intellectual case for free trade remains strong, but subject to provisos that have become more important – due to experience and changing circumstances – and that need to be addressed in a new consensus.

Comparative advantage is highly conditional on policy, as demonstrated by the failure of some countries to benefit from trade liberalisation, and by the persistence of the adverse effects of negative trade shocks. Recognition of these facts needs to be a core part of a new consensus designed to enable countries to get the most from trade.

There are now externalities that are fundamentally international. Climate change is a global problem, and addressing it requires the speedy development of new technologies and their rapid dissemination. A new trade consensus must recognise the priority of policies, at the national and international level, that support growth and dissemination of these innovations.

Note

[1] See Juhász et al. (2023), and also chapters on exports and on industrial policy in this volume.

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