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THE IMPACT OF FREE TRADE AGREEMENTS BETWEEN DEVELOPED AND DEVELOPING COUNTRIES ON ECONOMIC DEVELOPMENT IN DEVELOPING COUNTRIES

RAPID EVIDENCE ASSESSMENT, JULY 2015

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LIST OF ABBREVIATIONS

ASEAN	Association of South East Asian Nations
CARICOM	Caribbean Community
CAFTA	Central America Free Trade Agreement
EFTA	European Free Trade Area
EPA	Economic Partnership Agreement
EU	European Union
Euro–Med	Euro–Mediterranean Partnership
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
GDP	Gross Domestic Product
MENA	Middle East and North Africa
NAFTA	North American Free Trade Area
PAFTA	Pan-Arab Free Trade Area
QA	Quality Assessment
REA	Rapid Evidence Assessment
RoO	Rules of Origin
SACU	Southern African Customs Union
US	United States
WTO	World Trade Organization

Abbreviations used in quality assessments:

OBS	observational research design
OR	other review
P	primary research
S	secondary research
SR	systematic review

EXECUTIVE SUMMARY

This Rapid Evidence Assessment (REA) addresses two questions, to which it finds the literature offers partial answers (that can be supplemented by flanking analyses).

1. What has been the impact of Free Trade Agreements (FTAs) between developed and developing countries on economic development in developing countries?
2. What does this evidence tell us about how developing countries might best benefit from new FTAs (such as Economic Partnership Agreements (EPAs)), and how can they avoid harm?

Focusing particularly on analyses of fully or substantially completed FTAs, the REA finds that although some aspects of these questions have been assessed extensively others have been largely ignored and that, even in the areas where coverage is good, findings differ markedly between studies. It is based on a detailed quality assessment (QA) of 45 FTAs involving most Organisation for Economic Cooperation and Development states and 35 developing countries and regions. Most are North–South, but a strong sample of South–South agreements is also included. No systematic difference in the impact of North–South and South–South agreements was found in the assessed literature.

EVIDENCE ON FTA IMPACT

The literature provides clear guidance to policy-makers in several areas. It is good at estimating the effect of FTAs on the parties' trade flows. All but one of the 19 high or moderate quality primary studies that estimated trade growth found that the FTA had positive effects in at least some cases, and none found it to be negative. But the picture is mixed, with the range of estimated effects wide. In some cases the estimated trade effect was substantial, in others it was modest, and some partners were found to have gained nothing.

It also explains key factors that influence the scale of effect – many of which are within government control (although some only in the longer term). They include the following.

- The specific features of the FTA: how deep and broad are its provisions and how much policy change do they herald – and how fast? Unsurprisingly, deeper, broader, rapid change produces a bigger effect. Firms are less likely to incur additional administrative costs if the tariff advantage provided by the FTA is small. And a 'small' advantage can result not only from 'residual protectionism' (if the FTA fails to cut some tariffs) but also from 'broad liberalism' (if tariffs outside the FTA are already low).
- What the wider 'trade-related' environment looks like and the small print of the FTA (such as on rules of origin (RoO)). The FTA impact will be greater if the impediments to trade removed by the FTA are large relative to those that remain untouched.
- The most fundamental factor is the capacity of an economy to increase supply of products for which the FTA has boosted demand. This 'supply-response' is

touched on only briefly in the literature because it is determined by a wide range of factors, many of which fall outside the ambit of an FTA (and, hence, of the impact assessments). They include not only government policies but also the country's physical and institutional infrastructure, its human resources and all the other elements determining the short-term flexibility of an economy.

There is limited evidence that FTAs can encourage investment, technology transfer and firm upgrading, which is valuable because of the importance of supply capacity. But it needs to be deepened. On the one hand, the evidence that has been adduced suggests that there is a positive FTA impact. On the other, only seven high and moderate quality sources address these issues directly: two of them indicate that there are problems in attributing causality, and a third finds the channel through which foreign direct investment (FDI) is increased to be indirect.

GAPS IN KNOWLEDGE

The main problem for those seeking guidance from the literature on the likely effects of nascent FTAs is that key concerns are either ignored or receive very limited coverage in the studies judged to be of high or moderate quality. These are on the revenue, distributional and social/environmental effects of FTAs. Since the REA is concerned to summarise the evidence that does exist rather than to express opinions on what does not exist, the implications of these gaps (and how to fill them) are not discussed at length in the main text but are elaborated in an Authors' Note (Appendix B).

Supporters predict that FTAs will increase employment (as a result of increased economic activity corresponding to the partners' comparative advantage) and that the dialogue between parties will help to improve labour and environmental policy. Critics fear the reverse: that the labour displaced when inefficient domestic industries are out-competed by the newly created trade will not be fully absorbed elsewhere because of structural rigidities in the economy, and that governments will be forced to discontinue social and environmental policies in the face of commercial pressure from their partners.

The literature provides little guidance on what happens in practice. None of the high and moderate quality studies estimated the distributional impact or the employment and environmental effects of fully or substantially implemented FTAs. Two studies of FTAs near the start of their implementation period flagged the potential loss of government revenue from reduced tariffs – but no study of a mature FTA estimated the actual effects (or analysed the impact of government's response).

The minimum lesson is that at an aggregate level FTAs are in most cases neither 'a golden bullet' that will automatically destroy impediments to trade nor a potent source of the harm envisaged by critics. But the operative words are 'at an aggregate level' – particularly, though not exclusively, as regards the potential for harm.

GUIDANCE ON OPTIMISING FTA EFFECTS

The literature does provide some guidance on REA question 2 by identifying the factors likely to affect the trade impact of an FTA (and flagging those susceptible to government influence). The evidence emphasises the need for a consistent approach by governments over a range of variables covering not only trade-related policy broadly defined but also the easing of constraints that limit the economy's ability to shift resources into sectors given a boost by the FTA. Most of these are desirable in their own right and not just because of their trade effects. They reinforce the point that any contribution of an FTA to a country's economic development is likely to be influenced heavily by the broader policy stance of its government, the flexibility of the economy and the extent to which supply can respond to any new demand that has been created.

But more detailed guidance is limited by the absence of rigorous research findings on the distributional, social-environmental and, especially, revenue effects of FTAs (given that developing countries often rely heavily on tariffs as one of the easiest taxes to collect and that these effects may be front loaded). For this reason, Appendix B identifies some alternative sources of data that policy-makers can use to extend the limited guidance of the impact assessments. These include detailed analysis before strong data on 'impact' become available (to identify the direction, size and timescale of the most important short- and medium-term effects) and casting the analytical net much more widely than a specific FTA when assessing the impact of liberal trade and trade-related policies. Although not providing a full answer by itself to the REA questions, the FTA impact literature can provide the core when supplemented by such flanking studies.

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1.0 INTRODUCTION

1.1 THE RESEARCH QUESTIONS

This Rapid Evidence Assessment (REA) addresses two questions through a review of the literature on free trade agreements (FTAs) that gives particular attention to impact assessments of substantially or fully implemented agreements.¹

1. What has been the impact of FTAs between developed and developing countries on economic development in developing countries?
2. What does this evidence tell us about how developing countries might best benefit from new FTAs (such as Economic Partnership Agreements (EPAs)), and how can they avoid harm?

Each question has its own character. The first is positive in the sense that it could be answered with objective information (albeit based partly on assumptions about what would have happened in the absence of the FTA). The second is normative, concerned as it is with a judgement on the beneficial actions to take in the light of the answers to question 1.

The distinction is material for the REA, which finds that the questions are only partially answered by the literature. Question 1 is better served than question 2. Some issues (such as the effects on trade) have been assessed extensively, but others (such as socio-economic impact) have been addressed rigorously in only a few analyses. Even in the areas where coverage is good, the findings differ markedly between studies. One review of 24 studies of the Euro–Mediterranean Partnership (Euro–Med) agreements, for example, reported that the impact on gross domestic product (GDP) varied between them from +8.9% to -1.6% and on exports from +54.1% to -0.9%.²

Policy-makers need to take this into account when weighing up the substantial claims that are made by both trade liberals and their critics on this heavily contested topic. Gaps in the evidence are as relevant for research question 2 as are positive findings. Since the REA is concerned primarily to set out the findings from the literature, the description of the gaps (and the consequences of these) is developed in a separate authors' note (at Appendix B). This sets out some suggestions for gap-filling to support policy-makers taking decisions on newly agreed FTAs.

1.2 PROBLEMS IN PROVIDING ANSWERS

One reason for the patchy coverage of the REA questions in the literature is that they are difficult to answer. 'Estimating the economic impact of trade agreements is', in the words of a United States (US) Congressional Research Service report, 'a daunting task' (Villarreal and Fergusson, 2014 [P; OBS – mixed; →]: p. 10). It cites a lack of data and theoretical and practical problems (see Box).

¹ This focus was agreed in early discussions on the scope of the REA, as was the definition of 'developing countries' which is indicated in footnote 4 and was adopted for reasons explained at the end of Section 1.

² The source is shown in the REA notation as: Péridy and Roux (2012 [S; OR; ↑]: Table 1). See Sections 2.3 and 2.5 for an explanation of the characters and symbol in the square brackets.

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The task of weighing up the pros and cons can be helped by an understanding of why it is hard to reach a definitive verdict. Among the key problems are the following.

- There is a large number of intervening variables between 'an FTA' and 'economic development', which leaves wide scope for reasonable, well-informed analysts to differ over impact.
- Implementation normally takes place over a period of between ten and 25 years, with some of the most contentious provisions often left until the end, so that much will have happened to a country's broader economic and social environment by the time the FTA is completed.
- Trade and economic development are not synonymous, even though they are related, so a positive trade effect may or may not translate directly into an impact on development.
- Like any other policy reform, implementing an FTA will:
 - create winners and losers; and
 - produce effects in different arenas (including potential trade growth and diversification, job creation in some sectors and losses in others, investment and technology transfer); such that
 - analysts can reasonably differ over the relative priority they accord to these differential effects and to the role played by external variables.

Box 1: The anticipated effects of FTAs

FTAs are an exercise in partial trade liberalisation and rule-making (towards a limited number of partners), and as such their effects are contested. Supporters argue that, as with any liberalisation, the removal of barriers to trade will result *at an aggregate level* in an increase in the welfare of both parties. The rules within FTAs are also perceived as providing a more predictable policy environment (and in this way to foster economic activity and investment) and as being a ‘cement’ to bind together regional integration schemes.

But FTAs are also criticised from both sides. Some trade liberals identify potential negative effects from liberalising only partially. The essence of the liberal critique is that FTAs may ‘divert trade’ as well as ‘create trade’. The former is welfare reducing and, if it is relatively large, it may significantly reduce (or completely offset) the latter, which is welfare enhancing.

- Trade creation occurs when the removal of trade barriers results in more efficiently produced imports replacing some goods previously produced domestically relatively inefficiently. It creates ‘adjustment problems’ for displaced domestic producers but a gain for consumers (who include industries for which the good is an input).
- Trade diversion can occur when the goods in question were already being imported – from a globally efficient source. As a result of the removal of trade barriers to some partners but not others, these ‘efficient’ imports from a country that is outside the FTA are displaced by less efficiently produced goods from a country inside the FTA because it faces lower tariffs.

Because of this it is not enough, even from a liberal perspective, to discover that trade has grown between partners to judge the impact of the FTA. It is also important to know how much of the growth is ‘created’ and how much is ‘diverted’. Too much trade diversion relative to creation can reduce rather than increase economic welfare and GDP.

Critics of the liberal case for FTAs argue that governments need to retain the flexibility to shield some domestic producers from import competition and that over-rigid rules remove the necessary policy flexibility of governments. They fear, for example, that the adjustment to increased imports will be borne mainly by the poor and vulnerable whose alternative employment opportunities are the most limited. The broader and more detailed the FTA rule book, the more rigid a straitjacket it is to future policy initiatives.

2.0 METHODS

2.1 DEVELOPING COUNTRIES AND FTAS

The starting point for this REA is with the FTAs currently in place. The first step was to create a database of all relevant FTAs reported to the World Trade Organization (WTO). In accordance with question 1, the focus has been on agreements between developed and developing countries ('North–South'), but a small number of accords between developing countries ('South–South') has also been included in the review.

Depending on how accords involving more than two countries are counted, the database identifies some 260 regional trade agreements.³ We have focused our search on those that have been notified to the WTO under Article 24 for goods and, where they cover services, under General Agreement on Trade in Services (GATS) Article 5.⁴ Most of these are agreements between developed and developing countries, but the database also covers a wide range of South–South agreements. The developed countries include Australia (16 country accords), Canada (10), the European Union (EU) (39), Japan (11), New Zealand (17), the European Free Trade Area (EFTA) (25), and the US (10).

The great majority of the FTAs in the database are not yet fully operational. For only one-fifth has the date passed by which the WTO notification stated that they would be fully implemented. Although this group is described in the REA for ease of reference as 'fully implemented FTAs' the figure overstates the number that are actually complete as it takes no account of timetable overruns; the EU–Syria FTA, for example, is 'fully implemented' on this definition. At the other end of the scale, one-fifth of the FTAs are less than half-way through their implementation period.

So the population of FTAs that have been in place long enough to generate sufficient data for an impact assessment is much smaller than might be assumed from the figures on the total number.

- The early years of an FTA deal with the least substantial changes (such as 'liberalising' goods that were already duty free or faced very low tariffs).
- The lag in publishing trade statistics adds to the delay in assessing impact.
- A further twist is that signatories may be liberalising asymmetrically, so that an 'early snapshot' captures more substantial trade policy change by one party than another. One study, for example, found that the Canada–Chile FTA had a much more substantial effect on the latter's agricultural exports than the former's (Malhotra and Stoyanov (2008 [P; OBS – qualitative; →])). But the time period covered was one in which Canada had eliminated tariffs for all of the 65%

³ For example the EU's EPA with the Eastern and Southern Africa group could be considered as one agreement or four separate ones (between the EU and each of the African signatories). Our tally in most cases takes multi-country accords as multiple separate agreements (reflecting differences in national commitments).

⁴ This is because the WTO rules establish benchmarks for the extent and degree of liberalisation under such accords that facilitate comparisons between analyses of different agreements. Throughout, the terms 'developed' and 'developing' country have been used as very broad categories in accordance with WTO practice. Effectively, any WTO member that has not declared itself to be a 'developed country' is considered in this report to be a 'developing country'.

of agricultural goods covered by the agreement while Chile had done so for only 33% (p. 9).⁵

The REA has given particular attention, therefore, to studies of fully or substantially completed FTAs. Such studies are not only able to take account of the major provisions of the FTA but will also have available reasonably long time series of data with which to investigate any changes to trade patterns that could be the result of the agreement

One corollary is that a significant proportion of the FTAs studied in the assessed literature involve ‘developing countries’ that are now middle or higher income; few involve states that are low income. This was foreseen and accepted from the outset (and is one reason for accepting the very broad WTO definition of ‘developing countries’). The emphasis in the REA is to learn lessons from substantially implemented FTAs even if these relate mainly to a limited number of richer countries. To the extent that the literature allows, the REA applies these lessons to a wider group of developing countries in a way that is appropriate to their widely varying characteristics.

2.2 SEARCH STRATEGY

The strategy adopted for the search was to create a long list of potentially useful sources by using consistent search criteria and downloading analyses of as many FTAs in the database as possible.⁶ This was done using the following search engines: Google, Google Scholar, JSTOR, and SpringerLink.

Because of the need noted in Section 1 to focus on FTAs that have been in place long enough to generate sufficient data for an impact assessment the search focused first on research about FTAs that have passed their formal completion date and second on those currently being implemented. It then turned its attention to forward-looking analyses of FTAs under negotiation to identify the claims made for, and concerns expressed about, these agreements.

This approach yielded 144 studies on specific agreements, which we considered to be a sufficiently large population from which to identify generalisable conclusions.⁷ They covered two-thirds of all fully implemented North–South FTAs.⁸

⁵ Established at the Harmonised System of international product classification six-digit level.

⁶ Based on the list of notified FTAs, the search used combinations of the words ‘[Country] [country] FTA impact’, ‘[country] [country] FTA assessment’, ‘[country] [country] Free Trade Agreement impact [assessment/study]’, ‘[country] [country] Free Trade Agreement [ex-post/ex-ante] evaluation’. Between ten and 12 pages of the results from each enquiry were scrutinised to find any relevant material. Many times, mentioning one country set threw up studies on other FTAs as well, usually involving at least one of the two countries in the original search. If that particular FTA was on the list, the study was downloaded. When specifically looking for a type of agreement, the search terms ‘ex-post’ and ‘ex-ante’ were added in separate searches. The following terms in various combinations were also used in the searches: assessment, study, impact, evaluation.

⁷ The downloaded sources also included a number of theoretical studies about the effects of FTAs unrelated to particular empirical examples.

⁸ Most of the ‘missing’ FTAs involved EFTA. If these are excluded from the calculation, together with ‘special case’ FTAs (those with the Palestine Authority and Australia’s non-reciprocal ‘FTA’ with Papua New Guinea), the coverage rises to 97%.

Most analyse a single FTA and its impact on signatories, but some address the impact of several FTAs. These include the following:

- comparative analyses of FTAs with one common partner: e.g. Bergstrand et al. (2011 [P; OBS – quantitative; →]) analyse the EU’s FTAs with Chile, Jordan, Mexico, Morocco, South Africa and Tunisia;
- assessments of the implications for one country of its FTAs with several partners: e.g. Kang (2011 [P; OBS – quantitative; →]) compares the impact on Jordan of the Pan-Arab Free Trade Area (PAFTA) as well as its FTAs with the EU and US;
- analyses of the cross-cutting pattern of North–South and South–South FTAs in a region: e.g. Parra Robles et al. (2012 [P; OBS – quantitative; ↑]) assess the impact on ten Middle East and North African (MENA) countries of six North–South and South–South FTAs;
- studies on the impact of an FTA on third parties: e.g. Tsolo et al. (2010 [P; OBS – quantitative; ↓]) judge the economic impact of the EU–South Africa FTA on Botswana.

2.3 INCLUSION AND EXCLUSION CRITERIA

The search identified a very large number of short assessments such as policy briefs, news items, or short pieces/notes describing broad implications of an FTA. This was anticipated and it was agreed in advance that most of these would not be included in the database as being unlikely to offer the breadth or depth of analysis needed to assess FTA impact (unless based on a more substantial piece of work, which we anticipated would have been identified by the search in its own right).

As noted, forecasts of the anticipated impact of FTAs still under negotiation have been included in the database but they have not been quality assessed given that, by definition, they could not offer an impact assessment (only a forecast) on the FTAs covered. They have been studied, however, and used in the analysis to provide evidence on the expectations (favourable and unfavourable) that existed when the FTAs were being negotiated. They supplement the evidence culled from the quality assessed sources, some of which include literature reviews that provide a good insight into the expectations of impact. These expectations are used as a benchmark against which to judge the strength of the body of evidence assessed.

2.4 CODING FRAMEWORK

2.4.1 CLASSIFICATION OF THE IDENTIFIED STUDIES

The 144 selected studies were classified according to their methodology and in relation to the status of the FTAs they analyse using the terminology and definitions set out in DFID (2014).

The great majority of the studies were classified as primary research (analysing raw data). All of the remainder were secondary (interrogating or summarising primary studies).⁹ These are indicated in the REA text and table citations as ‘P’ or ‘S’ respectively. The research methodology applied in each study was classified as quantitative (using what DFID (2014: p. 5) describes as ‘mathematical techniques to illustrate data or explore causal relationships’), qualitative (‘collating “rich” data and inferring meaning’), or mixed (involving ‘the quantitative analysis of qualitative data or the interrogation of quantitative data through a qualitative lens’).¹⁰ Two-thirds of the studies are quantitative, with the balance split almost equally between qualitative and mixed methods.

All of the primary studies were judged to follow what DFID (2014: p. 7) labels ‘observational’ (OBS) research designs that ‘infer causal relationships from quantitative and qualitative data’. The secondary studies are primarily systematic reviews (SR). They ‘adopt exhaustive, systematic methods to search for literature on a given topic’ (DFID, 2014: p. 8).

Because of the problems noted above in measuring impact during the early years of an FTA, a very important area of coding was in relation to the status of the agreement analysed. The studies were split for the purposes of this REA into three main groups (with the number of studies in each group given in parentheses):

- Type 1: impact assessments of fully implemented FTAs (nine);
- Type 2: impact assessments of partially implemented FTAs (50);
- Type 3: forecasts of the potential effects of FTAs still under negotiation (85).¹¹

When assessing studies we made a further distinction in the case of Type 1 and 2 studies. This was according to whether, on the one hand, they provided a detailed analysis of the FTA terms or, on the other, presented either a stylised view of the FTA terms and/or focused on just a few aspects.

As can be seen, the majority of studies were Type 3 forecasts, against just nine Type 1 post-implementation analyses. Just under half of the Type 1 studies involved South–South agreements. This is a higher proportion than for Type 2 (one-fifth) and Type 3 (just over one-quarter).

2.4.2 THE STUDIES SELECTED FOR ASSESSMENT

We focused the assessment on Type 1 and Type 2 studies. We selected all the Type 1 and 36 of the 50 Type 2 studies.¹² This selection process resulted in 45 Type 1 and 2 studies being

⁹ Although Bustos (2011 [P; OBS – quantitative; →]), which is classified as primary, also develops a new theoretical model to show that a reduction in trade costs induces more firms to upgrade technology.

¹⁰ In the case of the quantitative studies reviewed in this REA, the ‘mathematical techniques’ used are primarily statistical and/or econometric methods.

¹¹ A further eight studies were classified as purely analytical, applying economic principles (and possibly some stylised facts) in a generic way to identify the anticipated potential effects of FTAs in general, but not in relation to any specific agreement. Given the agreed focus on impact assessment of actual, implemented FTAs, these studies were not reviewed further.

¹² The excluded Type 2 studies were either Master’s-level graduate studies or on the North American Free Trade Area (NAFTA), on which there were 14 studies in total. To avoid over-emphasis on just one agreement, we

assessed. Taking account of the multiple FTAs covered by some of the selected studies, the countries and regional groups covered by the assessment process are:

- Developed: Australia, Canada, EFTA, the EU, Japan, New Zealand and the US;
- Developing: Algeria, Association of South East Asian Nations (ASEAN), Bahrain, Central American Free Trade Area (CAFTA), Caribbean Community (CARICOM), Chile, China, Colombia, Dominican Republic, Egypt, India, Iraq, Jordan, Korea, Kuwait, Lebanon, Libya, Malaysia, Mexico, Morocco, Oman, Pakistan, Palestine Territories, Qatar, the Southern African Customs Union (SACU), Saudi Arabia, Singapore, Sudan, South Africa, Syria, Thailand, Tunisia, Turkey, United Arab Emirates, and Yemen.

2.5 CHARACTERISTICS OF THE ASSESSED STUDIES

The methodological approach of the assessed studies is very similar to that observed above for the whole population. 93% of them are primary research. A little under two-thirds are quantitative, with almost equal numbers of qualitative and mixed methodologies. And all the primary studies use an observational technique, while of the three secondary studies two are systematic reviews (SR) and the other uses, in the terminology of DFID (2014), a non-systematic or 'other' review method (OR).

For the purposes of establishing the quality assessment (QA) modalities, three types of approach to impact assessment were noted:

- studies that use descriptive statistics to identify changes in the scale and pattern of trade that could be attributed to the FTA;
- those that model formally the impact of an FTA; and
- analyses of data culled from business surveys that ask producers and traders whether their commerce has been affected by the FTA and their views on its effects (and on the remaining barriers to trade).

Each approach adds value to an understanding of the effects of an FTA and on 'lessons to be learned'. The most comprehensive studies assessed include two or more of them, and address possible reasons for the effects they observe. But each approach has its advantages and disadvantages. The reason for distinguishing between them in this context is that the criteria on which their quality is to be judged are not identical. As explained in Appendix A, the QA criteria used have been selected to take account of the differences between these three types of approach.

selected five of these (three of them Type 1) for assessment to provide a balance between different types of effect.

2.6 QUALITY ASSESSMENT FRAMEWORK

2.6.1 THE QUALITY ASSESSMENT CRITERIA

We have applied seven criteria in the QA of each selected source (Table 1), which are closely related to the Principles of Research Quality set out in ‘Assessing the Strength of Evidence’ (DFID, 2014: Table 1).¹³ Appendix A provides a fuller description and explanation for the criteria used.

Table 1. Quality assessment criteria

Criterion	Explanation
1. Research design	Does the design deal with complexity? There are many different features of an FTA, which affect groups/individuals in complex ways, implementation has been over many years during which many other, often more substantial things have happened.
2. Familiarity with the literature	There are two types of literature to assess: on methodology (to help deal with the complexity) and on the country studied (to map potential FTA effects).
3. Rigour of causality assessment (counterfactual)	When asserting impact, does the study make a realistic assessment of what would have happened over the period studied without the FTA?
4. Realism of assumptions made about details and implementation	For incomplete FTAs, where implementation may have only just begun, how realistic are the assumptions made about what will be done and when? The details of the ‘realism’ test will vary between the types of study. For FTAs still under negotiation, it will be framed in terms of how the study takes account of the fact that not everything will be liberalised immediately: what allowance is made for any exclusions from the agreement, the deferral of implementation over possibly many years, the existence of safeguard clauses and, flowing from all this, the scope for governments to anticipate changes before they are implemented either to promote positive or to mitigate negative effects? For a partly or fully completed FTA, how far does the study take account of what has actually happened and has been agreed will happen?
5. Breadth of analysis (with regard to country and FTA provisions)	Is the study wide ranging FTA-wise (looking at numerous different areas of the agreement) and country-wise (looking at differential effects on socio-economic groups)?
6. Appropriateness of data used	Are the data at a level of disaggregation appropriate to the product-specific effects of the complex FTA provisions? Are they the right data to test the hypothesis and support the conclusions (in their type, source and up-to-dateness)?

¹³ This fine-tuning of the Principles of Research Quality to the specific issues raised by FTA impact assessment, and the desirability of weighting these criteria, was agreed at an early stage of the work.

Criterion	Explanation
7. Appropriateness of estimation technique	Is there a theoretical model? Is the estimation technique appropriate? Do authors control for endogeneity? Do authors run robustness checks? Is the information provided enough for replicating the study?

FTA impact assessment is an intensely empirical exercise even though it needs to be well guided by theory and to apply appropriate techniques that take account of the latest scholarship. This is reflected in the fact that most of the identified studies are primary research and use quantitative or mixed methods. Taken together, the seven criteria emphasise the importance both of using appropriate data and techniques and of taking a rounded view of the FTA (in terms both of the breadth of coverage and the realism of the counterfactual against which impact is judged).

The seven criteria have been weighted to emphasise that some are not merely ‘important’ but ‘vital’ – if a study scores poorly on the latter it cannot be considered to be strong. Criterion 6 (data appropriateness) is given triple weight, with criteria 3 (counterfactual) and 7 (modelling) given double weight (for reasons explained in Appendix A).

Each selected source was given a score of 1 (low) to 3 (high) on each criterion, which was then weighted. The weighted scores for each assessed study were then summed to produce a lowest possible total score of 11 (i.e. a score of 1 on each criterion) and a maximum of 33. Full details of the scoring for each study are given in Appendix Table A2.

2.6.2 SCORES OF THE QUALITY ASSESSED STUDIES

We divided the range of possible scores into three almost equal groups and placed each of the assessed studies into the relevant quality group.

- We have classified all studies with a total score of 26 or more as high quality (indicated in the citations as ↑). All of the studies reaching this threshold received the maximum on at least two of the three weighted criteria as well as good scores on the other criteria.
- We have classified all studies with a score of 16 or less as low quality (↓). These studies all failed to score the maximum on any of the three higher-weighted criteria (3, 6 and 7) together with low scores on other criteria.
- Those studies with a score of 17–25 have been classified as moderate quality (→) – they have some strong features but are deficient on others.

Seven of the nine Type 1 studies have been rated as of moderate quality or better (Table 2), as have 24 of the 36 Type 2 studies (Table 3).

Table 2. Assessment of Type 1 studies

Study name and assessment	FTA(s)
Bergstrand et al., 2011 [P; OBS – quantitative; →]	Multiple
Bustos, 2011 [P; OBS – quantitative; →]	MERCOSUR
Canadian Ministry of Foreign Affairs and International Trade, 2013 [P; OBS – quantitative; ↑]	Canada–Chile
Colley, 2015 [P; OBS – quantitative; →]	CARICOM
Göransson and Khaled, 2013 [P; OBS – quantitative; →]	SACU

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Hoekman and Zarrouk, 2009 [P; OBS – mixed; →]	PAFTA
de Oca, 2008 [P; OBS – mixed; ↓]	NAFTA
Villarreal and Fergusson, 2014 [S; SR; →]	NAFTA
Weisbrot et al., 2014 [P; OBS – qualitative; ↓]	NAFTA

Table 3. Assessment of Type 2 studies

Study name and assessment	FTA(s)
Ando, 2007 [P; OBS – quantitative; →]	Japan–Singapore, Japan–Mexico
Ando and Urata, 2011 [P; OBS – quantitative; ↑]	Japan–Mexico
Athukorala and Kohpaiboon, 2011 [P; OBS – qualitative; →]	Australia–Thailand
Bae and Keum, 2013 [P; OBS – quantitative; ↓]	Multiple
Busse and Gröning, 2012 [P; OBS – quantitative; →]	Jordan–several
Canadian Council for International Cooperation (CCIC), 2012 [P; OBS – qualitative; ↓]	Canada–Colombia
Carvajal, n.d. [P; OBS – quantitative; ↓]	US–Chile
Cheong and Cho, 2009 [P; OBS – quantitative; →]	Multiple
Francois et al., 2005 [P; OBS – quantitative; →]	EU–several developing
Fu et al., 2012 [P; OBS – quantitative; →]	US–CAFTA–Dominican Republic
Gordon, 2007 [P; OBS – mixed; →]	CARICOM
Heng and Suu, 2009 [P; OBS – quantitative; →]	Singapore–several
Hirastuka et al., 2009 [P; OBS – quantitative; →]	Multiple
Hottenrott and Blank, 1998 [S; SR; ↓]	NAFTA
Hunt, 2005 [P; OBS – qualitative; ↓]	EU–Algeria, Morocco, Tunisia
Jackson, 2007 [P; OBS – qualitative; ↓]	Japan–Mexico
Jean et al., 2012 [P; OBS – quantitative; ↑]	EU–Chile
Jean, 2012 [P; OBS – quantitative; ↑]	EU–Chile
Kang, 2011 [P; OBS – quantitative; →]	Multiple
López-Córdova et al., 2003 [P; OBS – quantitative; ↑]	NAFTA
Mahmood and Gul, 2014 [P; OBS – quantitative; →]	Pakistan–Malaysia
Malhotra and Stoyanov, 2008 [P; OBS – qualitative; →]	Canada–Chile
Malpani, 2009 [P; OBS – qualitative; ↓]	US–Jordan
McDonald and Walmsley, 2003 [P; OBS – quantitative; ↓]	EU–South Africa
Milton and Siddique, 2014 [P; OBS – quantitative; →]	Australia–Thailand
Nanto, 2010 [P; OBS – mixed; →]	US–Singapore
Parra Robles et al., 2012 [P; OBS – quantitative; ↑]	Multiple
Péridy and Roux, 2012 [S; OR; ↑]	Multiple
Reveles and Rocha, 2007 [P; OBS – mixed; ↓]	EU–Mexico
Slotmaekers and Vinhas de Souza, 2005 [P; OBS – quantitative; ↓]	EU–Mexico
Tan and Cai, 2010 [P; OBS – quantitative; →]	New Zealand–China
Takahashi and Urata, 2009 [P; OBS – quantitative; →]	Multiple
Tovias and al-Khouri, 2004 [P; OBS – quantitative; →]	EU–Jordan
Tsolo et al., 2010 [P; OBS – quantitative; ↓]	EU–South Africa
United Nations Environment Programme (UNEP), 2004 [P; OBS – mixed; ↓]	EU–Lebanon
Zhang 2010 [P; OBS – mixed; →]	China–multiple FTAs

The scores reflect the strength of the studies in addressing the *impact* of FTAs (as required by the REA research questions); they do not necessarily provide a broader reflection on the rigour of research assessed as of moderate or low quality. The distinction arises partly because so few studies have been made after full implementation – which reflects in turn the fact that few FTAs involving developed and developing countries are fully implemented. In the absence of a large population of studies that *could have taken into account all relevant factors* we have added into this REA insights from studies of partially completed FTAs which, by definition, could not have done so (see Appendix A)

Not all of these studies assess the impact of an FTA on the developing country partner(s). Fu et al. (2012 [P; OBS – quantitative; →]) only consider the impact on US exports of apples to CAFTA and the Dominican Republic (and conclude that there is a strong positive relationship between tariff elimination and the growth of US exports to each partner country). Some are mainly concerned with the effects on the developed country but also include evidence on the developing partner's exports. Athukorala and Kohpaiboon (2011 [P; OBS – qualitative; →]) analyse the Australia–Thailand FTA primarily from the perspective of the former, though they also identify and discuss gains for Thailand. The study by Malhotra and Stoyanov (2008 [P; OBS – qualitative; →]) on the Canada–Chile FTA has a similar focus: primarily on Canada's exports but with some discussion also of Chile's exports. Jackson (2007 [P; OBS – qualitative; ↓]) shows Japan to be a major beneficiary of its FTA with Mexico, though the trade impact on the latter is also deemed to be somewhat positive.

2.7 LIMITATIONS

Although the body of literature could be described as 'large' in terms of the number of identified studies, most are not of fully implemented FTAs and the body is fragmented (the implications of which are considered further in Section 3). While many Type 3 studies have undoubtedly enriched research techniques, the actual impact of FTAs can only be judged from the much smaller number of Type 1 studies, together with Type 2 research undertaken after significant FTA provisions have been implemented. This relatively small number of directly useful studies is spread over numerous FTAs which differ in important details.

This limits the extent to which they can collectively be considered to have built 'a body of knowledge'. A few of the FTAs covered have been analysed in more than one 'dedicated' assessed study (i.e. a study focusing on a single agreement). They include Australia–Thailand, Canada–Chile, EU–Mexico, Japan–Mexico, NAFTA, and US–Jordan. But it is rarely possible to use one study to extend the findings of another as they do not provide their findings in a consistent way or they use different methods.

The Canada–Chile FTA provides one example. As noted above, in a Type 2 study Malhotra and Stoyanov (2008 [P; OBS – qualitative; →]) found that the partially and asymmetrically implemented agreement had resulted in a deterioration in Canada's balance of agricultural trade with Chile. The findings from a study completed after the agreement was fully implemented (Canadian Ministry of Foreign Affairs and International Trade, 2013 [P; OBS – quantitative; ↑]) were not inconsistent: it found Canada's *total* imports from Chile had grown faster than its exports. But it is not possible by comparing the two studies to determine whether Canada's adverse *agricultural* trade movement was mitigated (or reversed) after Chile's agricultural tariff reductions were fully implemented. This is because the later study did not provide its findings in a form that showed the balance for agriculture and how it evolved during the implementation period. Thus, an opportunity has been missed to assess the implications of asymmetrical tariff reduction.

A comparison of two studies of the Australia–Thailand FTA provides a second example. Athukorala and Kohpaiboon, 2011 [P; OBS – qualitative; →] find that the agreement 'contributed to a notable expansion of trade' (p. 14). But in a later study Milton and Siddique

(2014 [P; OBS – quantitative; →]) conclude that it has resulted in only modest trade creation. They explicitly address the difference in findings of the two studies and suggest as a possible explanation that they have used more aggregated data which ‘may mask changes that are occurring at a disaggregate level’ (p. 29). But the assessed literature does not include any ‘overview’ that allows the reader to judge the balance of positive and negative effects on all the main FTA issues.

The number of FTAs subject to more than one analysis increases when account is taken of multi-FTA studies. This applies particularly to analyses of FTAs affecting the Mediterranean and Middle East, since these cover multiple developed and developing countries. Péridy and Roux (2012 [S; OR; ↑]), for example, review the findings from preceding studies of the Euro–Med agreements. But it is questionable how far the experience of only one region should be generalised.

This fragmentation of the studies has also hindered benchmarking of the QA in this REA against the judgements of other users. The REA team has considerable experience of the methodologies employed and of the literature, but reference to external views would add confidence to the results presented in Tables 2 and 3. The number of citations of a study (especially in respected journals) is a useful check but, as noted in Appendix A, there are issues about the comparability of assessment criteria for studies using different methodologies and addressing different FTAs. The number of citations of specific studies may well take account of factors other than the strength of the paper in addressing the REA research questions (such as the level of interest in the FTA analysed or methodological development). Using peer reviews to benchmark the REA QA scores is hampered because only 11 of the 45 studies have been published as academic journal articles. The remainder include working papers, monographs, briefings and consultant reports, and include some of the highest-rated sources.¹⁴

¹⁴ The journal articles have not been assessed across the board as being of a significantly higher standard than the others: two of the 11 journal articles (18%) have been scored as high quality compared to 16% for the whole group; the comparable figures for moderate quality are 55% for the journal articles and 53% for all the assessed studies.

3.0 THE EVIDENCE ON THE IMPACT OF FTAS

This section evaluates the evidence provided by the assessed studies on the two REA questions:

- what has been the impact of FTAs between developed and developing countries on economic development in developing countries;
- what does this evidence tell us about how developing countries might best benefit from new FTAs (such as EPAs), and how can they avoid harm?

It finds that there is a significant number of high and moderate quality estimates of the effects of FTAs on the value of goods trade between partners. The most common finding is that trade has grown as a consequence of the FTA and that this growth has not been at the expense of 'trade diversion' (see Box in Section 1). But the scale of the effect varies widely and trade growth is only a part of FTA 'impact'. There is much less guidance on the other areas in which FTAs are expected to have an impact, and the gaps are even more marked in relation to the second REA question.

Section 3.1 summarises the overall pattern of these areas of good and poor coverage in the literature to indicate how far the two REA questions are answered. To the extent that a literature exists, what is known in each of these areas is described in Sections 3.2–3.5. But, as explained in Section 1, what is not known has also to be taken into account by policy-makers (especially when addressing REA question 2). More detail is provided in Appendix B on the implications of gaps in the literature and how they might best be filled.

3.1 WHAT ASPECTS OF FTA IMPACT ARE COVERED?

A majority of the individual studies are of high (7) or moderate (24) quality in terms of providing a rigorous answer to aspects of the REA research questions. Despite this, the body of evidence *on FTA impact* assessed in the REA can best be described using the terminology in DFID (2104: Table 2) as 'medium strength': the research questions aim to isolate cause and effect mainly through observational research methods but contextual differences substantially affect outcomes. Coverage is patchy. Important aspects of the REA questions are overlooked, the studies use differing research methods, and the agreements being studied exhibit major differences (as do the contexts within which they are implemented), making objective generalisation problematic.

Table 4 juxtaposes the coverage of the assessed studies with some of the positive and negative expectations expressed when FTAs are under negotiation or have recently been completed. The left side shows the claims made/fears expressed for FTAs; the right side shows schematically how far the assessed literature provides an impact assessment.

Columns 1 and 2 label the issue, and column 3 provides a few examples culled mainly from Type 3 studies in the database to illustrate the claims/concerns. Columns 4–7 give an indication of how far the studies described in more detail below provide evidence on the issues raised. Thus, there is a cross in column 4, 'numerous similar', if a significant proportion of the assessed studies not only deal with the issue but have broadly similar

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findings; column 5, 'numerous dissimilar' indicates cases where there is coverage in numerous studies but their findings differ markedly.

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Table 4. The expectations about FTAs and the findings after implementation

Issue		Expectations	Number of studies and similarity of their findings			
			<i>Numerous similar</i>	<i>Numerous dissimilar</i>	<i>Limited</i>	<i>Few or nil</i>
Trade effects	Growth in goods trade	European Commission (EC), 2013 (EU–Singapore): Over 10 years EU exports to Singapore rise by 3.6% and its imports by 10.4%. Busse et al., 2000 (EU–Mexico): Total EU imports from Mexico increase by 4.9%.		X		
	Services trade	Lord, 2001 (US–Jordan): The impact on Jordan’s economy of services liberalisation is expected to be substantial, and reflected in the services account of the balance of payments and the quantity of investment and the expertise required to up-grade and operate the services sectors. Chiasakul et al., 2010 (Thailand–Australia/New Zealand): The key message emerging from the simulation is that reductions in barriers to trade in services would generate positive effects on social welfare in Thailand. With full elimination of services trade barriers, GDP would grow by 0.49% compared to 0.35% without services liberalisation.				X
	GDP/welfare growth	EC, 2013 (EU–Singapore): Singapore’s real GDP will grow 0.94% faster.			X	
Technology transfer and increased investment		Levy, 2009 (US–Peru): The objective for the FTA for Peru was not new market access, but rather promoting investment by locking in economic reforms and broader integration in the world economy. Jackson, 2007 (Japan–Mexico): ‘Mexico anticipates that the trade deal will boost Japanese investment in Mexico. Mexico expects to attract US\$1.2 billion annually in Japanese investments’ (p. 6).			X	
Fiscal impact		Tovias and al-Khouri, 2004 (EU–Jordan): Given that import duties account for 12% of Jordan’s total government revenue, the country’s FTA tariff reductions will have a significant fiscal impact and it seems obvious that other consumer taxes will have to be raised. Hoekman and Konan, 2005 (US–Egypt): Tariffs account for over 15% of tax revenues and so an FTA will create pressure to raise other taxes in order to maintain government services.				X
Income distribution and employment		Salamanca et al., 2009 (US–Colombia): Forecasting the impact of the FTA on the Colombian small farm economy suggests that it would be critical for the 28% of small-scale producers (whose total income would fall by up to 45%) and serious for 13% of producers (whose total income would fall by 16%). Hunt, 2005 (EU–Maghreb): FTA assumptions about labour market flexibility ignore the potential implications of external and internal demand constraints for the terms of re-employment.				X
Environment and labour standards		Grynberg, 2001 (US–Jordan): The most significant change over earlier FTAs has been the inclusion of labour and environmental provisions that are subject to the system of non-binding dispute settlement which allows parties to take unilateral measures in the event of perceived violations that would constitute antidumping duties based on environmental and social standards. Fauchald and Vennemo, 2012 (Norway–China): ‘the green trade scenario will contain a mix of various commitments in order to realize ‘win–win’ (trade and environment) and ‘win–win–win’ (trade, environment, development) opportunities and avoid environmentally harmful consequences of commitments’ (p. 58).			X	

A large number of assessed studies (25) provide an estimate of growth in goods trade. But there are no significant impact assessments in the assessed literature of growth in services trade although an increasing number of FTAs contain commitments on services.¹⁵ And only seven studies (five of them of high or moderate quality) include some measure of welfare or GDP effect, with just one offering a precise quantitative estimate.

FTAs are also often credited with encouraging investment (and with it technology transfer) both directly and indirectly. The direct effect is a result of the increased economic activity induced by the removal of barriers to trade. The indirect effect is seen to arise from increasing investor confidence as a consequence of 'locking in' government policies. Although there is some evidence in the literature that FTAs can encourage investment, technology transfer and firm upgrading, it is not definitive.

Rigorous analyses of the other three anticipated effects of FTAs identified in Table 4 are notable mainly by their absence. The limited findings are described briefly in section 3.5 and the implications of them for policy-makers are elaborated in Appendix B. Because of the ease of collection, many developing country governments rely on trade taxes for a significant share of their revenue (with the two studies cited in Table 4, column 2, giving figures of 12% and 15%). Pre-FTA commentators fear that the removal of tariffs will pose serious adjustment problems. Yet this issue is not addressed by any of the high or moderate quality assessed studies undertaken after a significant part of the FTA implementation period had elapsed.

There are similar gaps in coverage of other 'non-trade' expectations/concerns raised during and immediately after FTA negotiations. Hopes are expressed that the FTA will increase employment (as a result of increased economic activity corresponding to the partners' comparative advantage) and that the dialogue between parties will help to improve labour and environmental policy. Critics fear the reverse: that the labour displaced when inefficient domestic industries are out-competed by the newly 'created trade' will not be fully absorbed elsewhere because of structural rigidities in the economy, and that governments will be forced to discontinue social and environmental policies in the face of commercial pressure from their partners. Although seven assessed studies considered labour and environmental effects of FTAs, all but two of them were judged to be of low quality.

3.2 THE TRADE EFFECTS OF FTAS

3.2.1 HOW MUCH TRADE CREATION AND GDP GROWTH?

All but one of the 19 high or moderate quality primary studies that estimated trade growth found that the FTA had positive effects in at least some cases. This tends to confirm that the bold claims made for FTA trade growth are realistic sometimes: the examples in Table 4 forecast an increase in EU imports from Singapore of 10.4% over ten years and from Mexico

¹⁵ The poor quality of statistics on bilateral services trade flows raises substantial methodological problems. As noted in an Asian Development Bank manual for FTA impact assessment: 'the methods to assess the impact of investment and services liberalization have not been well established ... and data on services and investment is insufficient to conduct rigorous analysis' (Plummer et al., 2010: p. 3).

of 4.9%, which fall within the range of estimates made of fully or partially implemented FTAs.

But a detailed review of the findings also indicates that the ‘range of estimates’ is wide: such effects are not inevitable and much depends on the precise provisions of the FTA and the characteristics of the partners (see Section 3.2.2). Nine studies gave several estimates (one for each party) and under half (four) of these found a positive effect in every case.

Even in these cases the range was very wide (from modest to substantial), and five studies found that at least one partner gained nothing. The three examples of modest impact given below have been selected to illustrate the wider picture painted in the literature.

- An analysis of ‘Jordan’s substantial liberalization over the last two decades’ finds ‘the impact has been rather small’ (Busse and Gröning, 2012 [P; OBS – quantitative; →]: p. 466).
- The Australia–Thailand FTA was found in one study to have ‘had modest trade creation effects’ (Milton and Siddique, 2014 [P; OBS – quantitative; →]: p. i).
- The EU–Chile FTA was assessed similarly to have triggered ‘a small aggregate economic gain’ (Jean et al., 2012 [P; OBS – quantitative; ↑]: p. 1).

Such findings are reinforced by those in a survey article of 24 Euro–Med studies which indicated an impact on GDP varying from +8.9% to -1.6% and on exports from +54.1% to -0.9% (Péridy and Roux, 2012 [S; OR; ↑]: Table 1). The survey shows big differences even between studies on a single country. In the case of Morocco, for example, the estimated impact on GDP ranges from +12.2% to -1.6% (Péridy and Roux, 2012 [S; OR; ↑]: Table 1).

Even studies that find significant effects also flag that the outcome can vary considerably between countries (and also depending on the methodology applied). One example that presents these differences (and the impact of methodological choices) very clearly is Parra Robles et al. (2012 [P; OBS – quantitative; ↑]). This uses fixed effects estimations to assess the effects of six FTAs involving MENA countries and finds that:

- the Euro–Med FTA has had a positive and significant impact on exports from the EU to MENA countries, but not the other way round;
- the FTA between MENA countries has had a positive and significant impact on Turkish exports and a positive but not significant effect on MENA exports;
- the FTAs between the US and Morocco and Jordan have had a positive impact on industrial MENA exports, but mainly owing to Jordan’s exports of textile and apparel products; and
- the customs union between the EU and Turkey has had a positive and significant impact for both imports and exports.¹⁶

¹⁶ The study also highlights the importance of estimation techniques and how differences in these may produce different results. It applied robustness checks using a first differences estimator which altered these findings: ‘only in some cases the EU agreement with Turkey and the Turkey agreement with South Mediterranean countries have a positive effect on trade flows’ (p. 17). But, as a further twist, the authors emphasise the limitations of the robustness check methodology and conclude that they prefer to rely on the results of the fixed effects estimations as detailed in the main text.

Only a few of these studies found that a significant part of trade between FTA partners was diverted from non-partners rather than newly created trade (see Section 1 Box for an explanation of the distinction between trade creation and trade diversion). Of the 25 assessed sources that estimate changes in the value of trade, just five high and moderate quality studies include estimates of both trade creation and diversion.¹⁷ Four of these find that there is *some* trade diversion but, taking account of the specifics of each study, this does not undermine the case that FTAs may enhance the welfare of members by boosting trade.¹⁸ Although two of the studies that consider diversion suggest that it can be a problem, they also tend to confirm that much depends on the pre-existing level of tariffs and the competitiveness of the FTA members.

3.2.2 FACTORS AFFECTING THE SCALE OF TRADE EFFECTS

Not all of the studies provide an explanation for any lower-than-expected FTA impact on trade flows.¹⁹ But those that do provide strong corroboration that the scale of effects will be influenced by:

- provisions within the FTA text;
- the relative importance and direction of trade-related policies falling outside the FTA's ambit; and
- the broader supply-side characteristics of the parties (i.e. what goods and services they can produce efficiently, and how quickly they are able to shift resources (manpower and capital) into sectors for which the FTA increases demand and out of those where it reduces demand for domestic output).

They confirm the reasonable expectations that the trade effects will be greater if the FTA text removes more trade barriers than fewer, if the barriers removed are not offset by other trade-related policies that are unaffected by the agreement, and if the economies are sufficiently flexible to respond to the new opportunities created. The next three sub-sections deal with each of these in turn.

3.2.2.1 FTA TARIFF PROVISIONS

Unsurprisingly, an important influence is the extent to which an FTA actually changes tariff policy. Those studies that address these questions suggest that smaller, deferred tariff cuts will reduce the trade effect directly, and that the smaller the tariff cut the less likely it is that firms will bother with any additional red tape required to access FTA provisions.

Even for a single country within a specific FTA the extent of tariff cuts will vary between products, since in most cases they face different levels of pre-FTA protection. For this reason

¹⁷ Or the net effect on welfare or GDP.

¹⁸ Only two report cases where the estimated trade diversion is compared to trade creation and found to be relatively great – and to affect the welfare of the FTA members rather than countries outside.

¹⁹ As explained in Section 2 and Appendix A, the methodology applied has a bearing on whether or not such causal questions are addressed. Business surveys, for example, will tend to ask firms why they use, or do not use, an FTA. But gravity modelling will not throw up explanations unless the authors specifically go beyond the model results to query the factors affecting the outcome.

there are no more detailed 'general lessons' to be drawn from the literature for decision-makers forming a view on the potential scale of FTA impact. Instead observers need to apply the broad general lessons noted above to their specific circumstances by answering the following set of questions. Are many high-tariff goods subject to liberalisation, and are tariffs being removed relatively fast? Or are tariffs already low (so the FTA makes only a small difference to market access)? Or are the high-tariff items excluded from liberalisation or end-loaded in a lengthy implementation period? Is there a great deal of 'red tape' associated with utilisation of FTA preferences?

There are many examples in the assessed studies of cases where these issues have had a substantial effect on the FTA's impact. The following examples have been selected as they provide a clear, concrete illustration of the range of findings found more generally in the literature.

- An analysis of six EU FTAs finds that they had a 'strong impact on trade where initial tariffs were high and where these tariffs were removed quickly and substantially across all types of goods' (Bergstrand et al., 2011 [P; OBS – quantitative; →]: p. 5). But where 'tariffs were already low, little effects were found' and FTAs 'with long phasing-in provisions ... are found to have insignificant effects', though this could change as implementation proceeds.
- Korea's FTA with Chile was found not to have eliminated tariffs on some of the country's 'major export items'. But in cases where 'tariffs were abolished immediately after the FTA came into effect', as with automobiles, mobile phones and televisions, 'exports increased sharply right after the agreement became effective' (Cheong and Cho, 2009 [P; OBS – quantitative; →]: p. 22). The same source notes that the accord with ASEAN 'designated over 200 items as ultrasensitive' and excluded them from the FTA.
- A survey of Japanese firms' use of three FTAs cited 'the small tariff preference' as a contributory factor explaining low utilisation rates in some cases (Takahashi and Urata, 2009 [P; OBS – quantitative; →]: p. 1). This finding was confirmed in another Japanese firm-level survey (Hirastuka et al., 2009 [P; OBS – quantitative; →]).
- The effects of the Euro–Med agreements are found to be smaller in cases where partner countries reduce tariffs only slowly (Péridy and Roux, 2012 [S; OR; ↑]: p. 577).
- A Type 1 analysis of the Canada–Chile FTA finds that trade grew fastest in two categories, one of which was of goods with a tariff cut of ten or more percentage points, and least rapidly in goods for which the tariff cut was smaller (Canadian Ministry of Foreign Affairs and International Trade, 2013 [P; OBS – quantitative; ↑]: p. 23). Unfortunately the clarity of this message is reduced by the finding that the second of the fastest-growing groups was of goods that were duty free prior to the FTA. The study also fails to give critical details to explain the low trade impact of modest tariff cuts. The limited liberalisation might have been because protection levels were maintained. But it might also have been because very low pre-FTA tariffs put a ceiling on how many points could be shaved off.

3.2.2.2 NON-TARIFF BARRIERS AFFECTING FTA UPTAKE

The FTA tariff reduction schedules are not applied in isolation from a host of other policies that in practice affect market access. This broader trade-related environment will influence the impact of FTAs. The ‘removal of tariffs does not mean a removal of trade protection’ note Péridy and Roux (2012 [S; OR; ↑]), who find that ‘as a matter of fact, overall protection remains high’ in Euro-Med signatories (p. 580).

Some of these policies, such as the RoO, are found in the technical appendices of the FTA text. Rules that firms cannot meet without investment and/or shifting the global value chain within which they operate (which may or may not be commercially viable) will restrict FTA uptake. Other aspects of the regulatory framework, such as many non-tariff barriers to trade, may not even be formally labelled as ‘trade policy’.

The following examples illustrate a broader finding. A review of Korean business firm survey data found that ‘only a small share of firms utilizes FTAs’ because of the associated red tape (Cheong and Cho, 2009 [P; OBS – quantitative; →]: p. 2). A study of PAFTA-using firm surveys concludes that ‘the overall level of trade restrictiveness of a number of countries in the region remains high’ (Hoekman and Zarrouk, 2009 [P; OBS – mixed; →]: p. 5).

The firm surveys generally identify as a limiting factor the cost of utilising FTA provisions, which is often perceived to be disproportionately high compared with the tariff preference on offer. This finding can be illustrated by three specific examples.

- The high cost of obtaining certificates of origin was identified by Japanese firms as a constraint to using the Japan–Mexico FTA (Ando and Urata, 2011 [P; OBS – quantitative; ↑]: p. i).
- A survey of Japanese firms’ usage of FTAs with Asia reported similar findings (Hirastuka et al., 2009 [P; OBS – quantitative; →]).
- A survey of 232 Chinese firms, 45% of which were using FTAs to some extent, produced conflicting findings (Zhang, 2010 [P; OBS – mixed; →]). On the one hand, only 14 firms stated that multiple RoOs had added significantly to business costs. But, on the other, nearly half of FTA users reported actual or potential significant costs from the negative effects of multiple RoOs in the six FTAs and two ‘closer economic partnership arrangements’ that China had concluded by the beginning of 2010.

The clear picture is that the extent to which an FTA will result in effective policy change (and hence produce a significant impact) depends partly on the relative importance of the tariff barriers that it cuts and the non-tariff barriers that are outside its scope. Unsurprisingly, given the vast range of ‘non-tariff barriers’ and the great differences between countries in their relative importance, the literature does not identify a list of key ones. Hoekman and Zarrouk (2009 [P; OBS – mixed; →]: p. 5) specifically identify some measures (such as licensing requirements, quotas and product standards) that were problematic but emphasise that the list of constraints is much longer and includes many regulatory and administrative measures that are captured in the World Bank’s Logistics Performance Index and Doing Business database.

The general lesson to be drawn from the literature is that the smaller the tariff cut within an FTA the less likely it is that firms will find it commercially worthwhile to tackle non-tariff barriers. This is in line with findings on the utilisation of non-reciprocal tariff preferences, such as the mid-term review by the Centre for the Analysis of Regional Integration at Sussex of the EU's Generalised System of Preferences (CARIS, 2010: Section 3.2.1).

3.2.2.3 SUPPLY-SIDE CONSTRAINTS

A study of the Canada–Chile FTA underscored the importance of the parties' economies being able to respond to new opportunities. It found that the majority of growth in trade came from products that were not traded prior to the FTA: such 'new products' accounted for 90% of the net increase in value of Canadian exports to Chile and over 76% of the net increase in its imports (Canadian Ministry of Foreign Affairs and International Trade, 2013 [P; OBS – quantitative; ↑]). Unless an FTA has indirect supply-increasing effects (such as might flow from greater investment), binding constraints to an increase in trade may remain in the form of limits to how far and how quickly a partner can increase production.

None of the studies that found modest trade effects attempted to quantify the contribution to this outcome of 'supply-side constraints' (i.e. the weak capacity of a signatory state to shift resources into the production of goods and services for which the FTA created new demand). Those studies that did consider the supply side tended to do so only in passing because many of the very wide range of constraints fall outside the ambit of an FTA trade analysis. Nonetheless, they did give examples of supply-side constraints in the specific cases studied, which may provide some guidance to policy makers. Three examples selected from high and moderate quality assessed studies illustrate the broader picture on the type of supply-side factors that tend to reduce the impact of the FTAs analysed.

- The PAFTA firm survey found that 'costs associated with ... weakness in transport related infrastructure services', as well as administrative red tape, 'are ranked as the most important constraints to intra-regional trade' (Hoekman and Zarrouk, 2009 [P; OBS – mixed; →]: p. i).
- A study of the Australia–Thailand FTA elaborated on the modest overall effects found by observing that the 'impact has been heavily concentrated in a few product lines' (Athukorala and Kohpaiboon, 2011 [P; OBS – qualitative; →]: p. i). It attributes this to 'commodity specific, supply-side factors' which influence preference utilisation.
- Focusing on the Maghreb (and the clothing industry in particular), Hunt (2005 [P; OBS – qualitative; ↓]) argues that these countries 'face major difficulties with respect to the generation of the increased domestic employment and rising incomes that ... optimistic proponents of liberalisation thought would ensue from FTA implementation combined with implementation of associated domestic policy reforms' (p. 217).

Supply-side constraints include not only government policies but also the country's physical and institutional infrastructure, its human resources and all the other elements determining the short-term flexibility of an economy. As such they require a much broader canvas than

one that covers just a specific FTA. This point is taken up again in Appendix B as one of the reasons why the FTA literature provides only a partial answer to the REA impact question.

3.3 TECHNOLOGY TRANSFER AND INVESTMENT

Only eight high and moderate quality sources address the supply-side directly by focusing on the effects of FTAs on technology transfer and investment. They tend to confirm to a certain extent the assertions recorded in Table 4: that, in addition to boosting trade directly, FTAs encourage investment and technology transfer both as a direct result of the treaty's provisions (if it covers these areas) or indirectly by locking in more predictable trade policies. Three of the high and moderate quality studies finding evidence of a positive effect on technology transfer or investment illustrate the wider picture.

- Bustos (2011 [P; OBS – quantitative; →]) examines the impact of Mercosur on technology upgrading by Argentinian firms using a specially developed theoretical model. It finds that firms producing goods for which Brazil's tariffs have been reduced the most increase their investment in technology fastest.
- López-Córdova et al. (2003 [P; OBS – quantitative; ↑]) assess the impact of NAFTA on total factor productivity in Mexican manufacturing firms. Although recognising that distinguishing NAFTA's contribution 'proves rather challenging' given other related events, they conclude that 'the evidence strongly suggests ... that the greater integration of the Mexican economy to North America and the world economy at large had a substantial impact on productivity performance' (p. 69).
- Göransson and Khaled (2013 [P; OBS – quantitative; →]) investigate the impact of SACU on FDI during the period 1996–2011 using panel data for 40 countries in sub-Saharan Africa. They conclude that SACU has had a positive and indirect influence on FDI inflows to member countries through the channel of openness.

In addition, two of the studies rated as low quality also provide some limited evidence on investment. Bae and Keum (2013 [P; OBS – quantitative; ↓]) examine how Korea's FTAs with Chile, Singapore, ASEAN and EFTA have affected its outward and inward FDI. They conclude that they have increased Korea's outward FDI to both developed and developing countries, but have had a significant effect on inward FDI only in the case of the FTAs with higher-income countries. Jackson (2007 [P; OBS – qualitative; ↓]) asks whether the Mexico–Japan FTA has increased FDI. It finds that FDI has increased, but is cautious about the role of the FTA in producing this result. Instead it points to the role of other variables such as the regulatory environment, fiscal policy and physical infrastructure.

A tangentially oriented study (Carvajal (n.d. [P; OBS – quantitative; ↓]) concludes that the US–Chile FTA has had a beneficial effect on the financial reporting quality of Chilean firms. Companies that are more involved in US product markets experience a positive effect on their financial reporting quality.

One study underscores the complexity of the relationship between FTAs and FDI. Hirastuka et al. (2009 [P; OBS – quantitative; →]: p. 14) note that Japanese companies make more use

of FTAs to which Japan is not a party than they do of those that it has signed. They are able to do this by operating through their foreign affiliates in signatory states.

Although these sources tend to support the claim that FTAs accelerate investment, policy-makers need to bear in mind that the number of studies addressing the issue directly is very small. Moreover, two of them indicate that there are problems in attributing causality and a third finds the channel through which FDI is increased to be indirect. It would be wise, therefore, to keep an open mind until more evidence is available. Unlike trade creation and diversion (on which there is a strong theoretical literature), these are issues for which empirical evidence provides the only basis to assess how far in practice the expectations of FTAs are confirmed in practice.

3.4 AN OVER-ARCHING ISSUE: ATTRIBUTING CAUSALITY – FTAS AS A ‘SYMBOL’

One very common fault in the surveyed literature limiting the guidance it offers to policy-makers concerns the attribution of causality. It is not a problem only in relation to investment and technology: over half of the assessed studies scored the minimum on the QA causality criterion (see Appendix Table A2). This was not limited to the studies assessed as low quality (for which only two of the 14 scored more than the minimum). Low-scoring studies suffered from the so-called ‘*post hoc* fallacy’ (that because event Y followed event X it must have been caused by X). They failed to make any serious attempt to construct a counterfactual taking account of what might have happened in the absence of the FTA. A related but more subtle issue involves distinguishing specific ‘FTA effects’ from those arising from other policies pointing in the same direction.

Although the problem of establishing causality arises to an extent with countries that liberalise more broadly than can be judged from a narrow focus on one FTA, several authors have made a serious attempt to deal with the issue. Athukorala and Kohpaiboon (2011 [P; OBS – qualitative; →]), for example, do take into account Thailand’s ASEAN equation when analysing the impact of the Australia–Thailand FTA. Also, Mahmood and Gul (2014 [P; OBS – quantitative; →]) try to account for Malaysia’s trading relations with ASEAN while judging the impact of its FTA with Pakistan. Jackson (2007 [P; OBS – qualitative; ↓]) shows for the Japan–Mexico FTA that there were periods of expanded trade activity prior to the implementation of the cross-regional agreement and that other variables, such as the regulatory environment, fiscal policy, and physical infrastructure, may have played a key role in promoting trade and FDI.

The issue of causality arises with particular force – and with authors tending to draw opposite conclusions – in the cases of Chile and Mexico, where FTAs are treated more as symbols by some of the assessed studies than as discrete policies with finite boundaries. The studies tend to agree that in both cases the FTAs analysed were a particular manifestation of a broader set of government policies that began before and continued after the FTA was signed.

In the case of Chile, these policies were seen to have resulted in a rapid growth of exports. This ‘success’ has tended to be co-opted as an ‘FTA success’.

In the case of Mexico, NAFTA is widely seen to have been used by the government of the day to 'lock in' a broad set of policies, but with effects that can be viewed more negatively. Critics tend to ignore factors other than NAFTA in producing these effects; supporters take the opposite position. One review, which presented evidence on both sides (while leaning towards the positive), argued that it 'may have accelerated the trade liberalization that was already taking place, but many of these changes may have taken place with or without an agreement' (Villarreal and Fergusson, 2014 [S; SR; →]: p. i). In the specific case of NAFTA's impact on Mexican agriculture, it notes that many critics 'say the agreement led to severe job displacement' and that 'one study estimates these losses to have been over a million' (p. 17). However, it also argues that 'many of the changes can be attributed to Mexico's unilateral agricultural reform measures in the 1980s and early 1990s' (i.e. before NAFTA was agreed).

3.5 THE NEGLECTED ASPECTS OF FTA IMPACT

Table 4 shows significant gaps in coverage in three areas of concern to policy-makers in developing countries: the fiscal impact of FTAs, their distributional and employment effects, and a group of issues concerning the environment and labour standards (to which could be added human rights).²⁰

The **fiscal impact of FTAs** is particularly important in answering the second REA question, as trade taxes are a major source of government revenue in many poorer states because they are some of the easiest to collect when administrations are weak. Yet none of the assessed studies estimates the fiscal impact. Tovas and al-Khouri, 2004 [P; OBS – quantitative; →] express concern at the potential fiscal effect on Jordan of its FTA with the EU, but as their study was written before any such effect would have occurred it is only a forecast.

The **distributional and employment effects of FTAs** are major concerns of critics. One of the two forecasts cited in Table 4 as examples to illustrate the issue gives precise numbers: it predicts that the US–Colombia FTA will be critical for the 28% of small-scale agricultural producers in Colombia, whose total income would fall by up to 45% (Salamanca et al., 2009). The other warns simply that the EU–Maghreb FTAs are too optimistic about the flexibility of the North African economies to re-absorb into industries given a boost by the agreement labour that is displaced by cheaper imports from Europe (Hunt, 2005).

An FTA is certain to produce *some* distributional impact. Like any other change that affects the relative prices of goods and services, the effects will vary between different groups of people. Hence, it is an area in which developing country decision-makers weighing up the evidence would benefit from rigorous primary research. Yet none of the assessed studies estimates the domestic distributional impacts of the FTAs examined.

There is a similar gap in the high quality evidence on actual **impact of FTAs on labour and on environmental standards**. Does the shift in the level and balance of economic activity consequent upon the FTA help raise wages (by increasing demand for goods) or lead to

²⁰ Although the human rights impact of FTAs is an area of concern, and there exist specific monitoring provisions in relation to the Canada–Colombia FTA, we have not found any clear statement of the modalities through which an FTA would affect human rights directly, let alone an impact assessment.

impoverishment (as the two studies cited on the left side of Table 4 fear); does it result in the adoption of environmentally unsustainable practices, as alleged by de Oca, 2008 [P; OBS – mixed; ↓], either as a result of increased demand or because farmers impoverished by increased import competition are forced onto marginal land? Villarreal and Fergusson, 2014 [S; SR; →] survey literature on the employment effects of NAFTA without reaching firm conclusions, but none of the moderate and high quality primary research studies estimates how far such hopes and concerns were borne out in practice.

The issues of labour and environmental standards (as well as human rights) are aspects of a broader attention to ‘**policy space**’ (or its obverse, ‘locking in’). The two illustrative examples in Table 4 address the perceived consequences – both positive and negative – of limiting the freedom of manoeuvre of FTA parties on such issues. But policy space is not explicitly addressed in most of the high and moderate quality assessed studies; they fail to assess evidence on whether FTA signatories were unable (for good or ill) to adopt new policies because they were prohibited in the treaty. The seven quality assessed reports that do focus on aspects of policy space tend to be broadly assertive rather than precisely analytical and fail convincingly to demonstrate a plausible causal link between the actions (or, more usually, inactions) that concern them and FTA provisions.

Much of this coverage relates to Mexico and has been assessed as of low quality. It is heavily influenced by the tendency noted in Section 3.4 to treat the FTA as a symbol for wider government policies. Weisbrot et al., 2014 [P; OBS – qualitative; ↓], for example, are very critical of the performance of the Mexican economy against available economic and social indicators. But they accept that ‘NAFTA was just one variable among others that could account for Mexico’s poor economic performance over the past 20 years’, even though they argue that ‘it appears to be related to other economic policy choices that have negatively affected the Mexican economy’ (p. 2). Reveles and Rocha (2007 [P; OBS – mixed; ↓]) have examined the effects of the EU–Mexico agreement on policy space. They conclude that its effects are similar to those of other reciprocal FTAs which have ‘a negative effect on the ability of states to foster national and local economic development and to promote and protect human rights’ (p. 7). But they are weak on the specifics of how particular provisions in the FTA have restricted actions that the Mexican government wished to introduce.

But Mexico is not the only country on which there has been some analysis of policy space. Malpani (2009 [P; OBS – qualitative; ↓]) addresses the effects of Jordan’s intellectual property rights legislation on its domestic pharmaceutical industry. It argues that the new rules on data exclusivity are a consequence of WTO membership *and* of the US–Jordan FTA, and have had an adverse effect on the domestic production of generic medicines. But the focus is narrow and takes little account of trade in pharmaceuticals (including generic drugs). By contrast, Kang (2011 [P; OBS – quantitative; →]), although it does not address policy space, finds that pharmaceuticals have exhibited ‘a pretty stable export performance to [Jordan’s] FTA partners’, and while it finds ‘no strong evidence’ of a direct FTA effect it argues that ‘PAFTA could work as an institution to secure export markets of the Jordanian pharmaceutical products because PAFTA members recognize Jordan as a competitive supplier of pharmaceutical products in the Arab region’ (p. 88).

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The conclusion is that in the areas covered by this sub-section the existing literature provides insufficient guidance on how to maximise FTAs' benefits and minimise their harm for developing countries. In the absence of guidance from the literature, policy makers hoping to find insights for nascent FTAs need to look elsewhere (see Appendix B). The absence of coverage of fiscal effects is particularly noteworthy given that these may occur within a few years of an FTA's entry into force. The absence of hard evidence on distributional impacts is linked to the frequent lack of appropriate data. The analysis of policy space simply needs a more rigorous approach to be adopted to establishing plausible lines of causality.

4.0 CONCLUSION

There is no single answer to the question: ‘What has been the impact of Free Trade Agreements (FTAs) between developed and developing countries on economic development in developing countries?’ The overall body of literature reviewed in this REA is large, but that concerned with analysis of actual impact is of only medium size. More of the quality assessed studies are of moderate quality than either of the alternatives. But by their nature the studies are context specific and the consistency of the findings is mixed – i.e. studies based on a variety of different methods applied in a range of contexts have produced contrasting results.

4.1 ASYMMETRICAL EVIDENCE BASE

One reason why the post-FTA studies leave some questions unanswered is that there are so few of them compared to the pre-FTA literature. The much larger number of studies produced before an FTA has been finalised than after implementation is a striking feature of the body of literature. This asymmetry is apparent from a simple comparison of the number of studies classified as Type 1 (nine) and Type 3 (85).

But the contrast between the level of concern (as evinced by the number of studies) before and after the FTA is agreed is even greater than these figures suggest. As explained, when assessing sources we differentiated between Type 1 and 2 studies according to whether they provided a detailed analysis of the FTA terms or whether they presented a stylised view of the FTA terms and/or focused on just a few aspects. Only seven of the assessed studies written after a significant period of FTA implementation (or 5% of the total number of studies in the database) provided an analysis disaggregated to show differential effects on goods for which the FTA had created significant policy change compared with those where there had been no change (either because the goods were excluded from FTA liberalisation or because imports were already duty free).

The implications of this apparent lack of concern with the details of the policy changes actually agreed are accentuated because of the way in which FTAs tend to be negotiated. Agreement on the most difficult issues (which will include the extent and speed of liberalisation on the most sensitive products) often occurs at the very end of the negotiations, after which the FTAs are usually signed without substantial amendment (which would risk unravelling the fine balance achieved). One consequence is that Type 3 studies are necessarily based on assumptions about the most sensitive details of the FTA, as these have not yet been agreed. The conclusions may be heavily biased by assumptions that are found, in the event, to be wrong.

Among the critical details that may be missed are the RoO, which determine which goods actually receive a tariff preference. These are specifically noted in Athukorala and Kohpaiboon (2011 [P; OBS – qualitative; →]) as one reason for cautioning that predictive assessments based on general equilibrium analysis of declared tariff preferences may produce exaggerated results. Their importance has also been noted in many studies of tariff preferences (such as CARIS, 2010).

4.2 WHAT THE LITERATURE EXPLAINS WELL

The literature is good at estimating the effect of FTAs on the trade flows of the parties. But the results vary markedly. For any study showing that an FTA has had a large positive effect on trade there will be others finding that it has not. But none of the studies assessed as moderate or high quality in the REA shows that FTAs have had a negative effect on aggregate trade between the signatories. Those not identifying a strong positive effect on trade tend to conclude that the FTA has had only a minor impact, or has affected only some partners.

In part these differences may be because of technical aspects of the methodologies applied (explaining why, for instance, studies of the same FTA have varying results). But it is also clear that a significant explanation for the differences is that the features of FTAs vary, as do the politico-economic contexts within which they are implemented. The extent to which high tariffs are removed tends to have an impact, as does the small print of the agreement (such as RoO and administrative requirements). But there are many other trade and non-trade policies outside an FTA that also constrain trade. Unless these are also eased the trade effect may be reduced. The limited evidence suggests that an FTA may have a positive impact on FDI and technology adoption. But many other constraints to increasing production of goods given a boost by FTAs are wholly outside their ambit, such as inadequate infrastructure, which may be particularly important in poor countries.

There were no clear differences reported between North–South and South–South FTAs in terms of their effects on trade. Although the trade policies of some Southern partners were found to be restrictive, the unwillingness of the EU to liberalise fully agricultural imports under the Euro–Med agreements was also noted. Studies on the FTAs of developing Asian countries do not show any clear pattern of agreements with those involving developed country partners having larger trade effects than those with other developing countries, or *vice versa*.

In summary, the evidence emphasises that if the trade effects of an FTA are to be maximised there needs to be a consistent approach by governments over a range of variables covering not only trade-related policy broadly defined but also the easing of constraints that limit the economy's ability to shift resources into sectors given a boost by the agreement. Most of these are desirable in their own right and not just because of their trade effects. They reinforce the point that any contribution of an FTA to a country's economic development is likely to be influenced heavily by the broader policy stance of its government, the flexibility of the economy and the extent to which supply can respond to any new demand that has been created.

4.3 ISSUES NOT WELL COVERED

The minimum lesson is that in most cases FTAs are neither 'a golden bullet' that will automatically destroy impediments to trade nor – at an aggregate level – a potent source of harm. The high and moderate quality quantification that has been done suggests that an FTA will result in an increase in trade between partners compared to the counterfactual of what

would have happened in its absence. And it may be a large increase for some partners. But the scale is heavily dependent on the factors identified in Section 3.

However, the operative words are ‘at an aggregate level’ – particularly, though not exclusively, as regards the potential for harm. Some of the best studies assess the effects of FTAs on trade at a disaggregated level. But the main impact may be on small socio-economic groups whose distinct features are homogenised in the aggregation that is inevitable when assessing the performance of complex agreements over many products for one or more decades.

The studies reviewed do not, in the main, even address seriously some of the key concerns expressed in the pre-FTA literature. These include the distributional impact on specific socio-economic groups and the revenue implications (which include the distributional effects of either a fall in government revenue or the replacement of taxes on trade at the border by other taxes). The issue of ‘policy space/locking in’ has been partly addressed in the sense that some governments have clearly avoided being ‘locked in’, but at the ‘price’ according to some studies of a reduced FTA impact (for good or ill).

There is one sense in which the absence of evidence could be considered as suggestive. The fact that few critics of the liberal agenda have attempted substantial assessments of the actual impact of the limited changes created by FTAs might suggest that any impacts have been insufficiently sharp to attract attention. It might be reasonable to infer, therefore, that any adverse effects are small scale and/or dissipate over time, which is why they are not picked up.

But, fundamentally, the absence of negative findings cannot be taken as evidence of a positive outcome. Not only is there a strong asymmetry between the number of sources assessing the potential effects of FTAs before they are signed (large) and the number that assess impact after the agreements have been in force for some time (small), but also the latter overlook important concerns (such as the effects on income distribution) expressed in the former.

4.4 GUIDANCE ON RESEARCH QUESTION 2

Unfortunately, the literature provides only limited guidance to REA question 2: ‘What does this evidence tell us about how developing countries might best benefit from new FTAs (such as EPAs), and how can they avoid harm?’ This is partly because the evidence summarised in Section 3 is limited and does not all point in the same direction. But it is also partly because a number of key questions for developing country policy makers remain largely or wholly unanswered by high and moderate quality research (see Box in Section 1 and Table 4).

There is no universal answer to the question. Neither the benefits nor the potential for harm are inevitable – much will depend on the context in which the agreement is implemented. The evidence provided by the literature is that the FTA route to liberalisation is a partial one, and so both the positive effects of removing trade barriers foreseen by trade liberals and the negative consequences feared by their critics are likely to be limited. This is particularly the case if a country agrees only a small number of FTAs.

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The surveyed literature does help, however, to identify the key factors that determine impact. They include the specific features of the FTA. How broad are its provisions and how much policy change do they herald – and how fast? What does the wider ‘trade-related’ environment look like and is the small print of the FTA (such as on RoO) onerous? How great are the impediments to trade removed by the FTA compared to those that remain untouched? And, most fundamentally, what is the capacity of each party’s economy to shift resources out of sectors that face increased pressure and into those given a boost by the FTA?

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APPENDIX A. QUALITY ASSESSMENT CRITERIA

The seven criteria used for the QA were adopted for three reasons: to address the specific requirements of FTA impact analysis; to accommodate differences in the methodologies of the selected studies which require some variation in the balance between the assessment criteria; and to facilitate different weighting for some criteria partly to take account of these differences.

FTA impact assessment is an intensely empirical exercise. Taken together the seven criteria emphasise the importance both of using appropriate data and techniques and of taking a rounded view of the FTA (in terms both of the breadth of coverage and the realism of the counterfactual against which impact is judged).

As explained in Section 2.6.2, the QA on FTA impact is not necessarily always an exact reflection of the rigour of each work. Some studies addressed different questions from those of the REA but have been useful nonetheless in throwing a partial light on the subject. For example, a review of the titles of the 45 assessed studies shows that 12 were limited to the effects on trade and a further six to the effects on business, both of which form are a part – but only a part – of an assessment of the impact of FTAs ‘on economic development in developing countries’. Others were undertaken at a time when too little data were available for a full impact assessment. Even when based on rigorous analysis, it is not helpful to describe such studies as providing high quality guidance on the economic impact of the FTA analysed if they were necessarily based on very partial data and may have been overtaken by events. The information they provide may be valuable (and is cited in Sections 3 and 4), and in the early days of implementation they may be among the best approaches for making an *early* impact assessment. For example, studies, that have focused on data from business surveys to identify traders’ and producers’ early responses to an FTA (such as Ando and Urata (2011 [P; OBS – quantitative; ↑]) and Hoekman and Zarrouk (2009 [P; OBS – mixed; →]) are helpful in identifying the features of an FTA that stimulate firms’ interest. But the operative word is ‘early’: while such studies contribute to our understanding, those that include only a survey cannot be considered as definitive impact assessments.

MAKING THE QUALITY ASSESSMENT CRITERIA METHODOLOGY NEUTRAL

The three main approaches to impact analysis described in Section 2.4 have different requirements. The QA criteria use weighting to accommodate these differences.

A key feature of studies using descriptive statistics is that they must accurately identify the policy changes that have actually been made as a consequence of the FTA, and use trade data that are sufficiently disaggregated to plot any difference in trade performance between heavily and lightly affected products.

Any observed differences between the performance of substantially liberalised and less or unliberalised products can contribute to an indication of impact (together with other information used to establish a plausible counterfactual). Hence, the critical requirement for descriptive statistical analysis is appropriate detail.

Studies based on modelling, by contrast, judge FTA impact from the level (and in some cases the composition) of trade while aiming to eliminate factors other than the FTA that could account for any observed changes. Therefore the emphasis is to identify changes in trade patterns because of the FTA which cannot be explained by other endogenous and exogenous factors, rather than to plot the detailed tariff changes agreed in the FTA.

For modelling the critical requirement is that the estimation techniques be adequate and take into account potential biases (albeit that it is also possible to reflect to some extent the details of the FTA by using disaggregated data at the sectoral and product level and by constructing the FTA variable in an appropriate way).

Weighting is needed because some criteria are more central than others – and what is central differs between studies using descriptive statistics and modelling. The highest weight (3) has been given to criterion 6 (appropriateness of data used) to reflect the centrality of using appropriate data in all FTA impact assessments. Criteria 3 (rigour of causality assessment) and 7 (appropriateness of estimation technique) have also been given greater weight (2) than the other criteria.

Criterion 3 has been emphasised because of the importance of assessing the impact of an FTA against as realistic a benchmark as possible of what might have happened in the absence of the FTA. This is far from straightforward given that one or two decades may have elapsed before the FTA is fully implemented, during which time many other things will have happened.

Criterion 7 has been emphasised for two reasons. One is that studies using modelling must have applied estimation techniques adequately and taken into account potential biases. The other is more nuanced: it is to help the QA to deal in an even-handed way with studies that use descriptive statistics and those that involve modelling. Some studies do both – and the criteria favour them. But others do one or the other, and, as explained above, they have opposing advantages and disadvantages.

The advantage of descriptive statistics is that they can be appropriately detailed – showing, for example, what has happened to trade in the goods that have actually been liberalised in an FTA compared with those that have not. But they do not systematically take account of other possible causes apart from the FTA of the trade pattern changes that are identified or of second-round and indirect effects. The latter are better covered by modelling – but often at the price of imprecision. The models typically cannot be used to simulate the effects of, say, liberalising one cut of chicken meat but not another; at best they will split agriculture and industry into a relatively small number of sub-sectors, each of which is likely to include both goods that have experienced substantial tariff cuts and others that have experienced none (either because they are excluded from the FTA or have had liberalisation deferred until after the end of the study's review period, or because the pre-FTA rate was already zero).

Strong studies using descriptive statistics but no modelling tend to score highly on criteria 4 (realism of assumptions on details and implementation) and 5 (breadth of analysis with regard to country and FTA provisions) but by definition can score no more than 1 on

criterion 7. By contrast, while strong modelling studies score well on criterion 7, they will tend to be less well scored on criteria 4 and 5. By giving criterion 7 double weight, while criteria 4 and 5 are single weighted, we believe that any bias between these two types of study has been reduced.

The full scoring using the seven criteria is presented at the end of this Appendix in Table A2.

MAPPING FROM THE QUALITY ASSESSMENT CRITERIA TO THE PRINCIPLES OF RESEARCH QUALITY

The seven criteria respond to all of the Principles of Research Quality (DFID, 2004: Table 1) except two that appear to be of less direct relevance to FTA impact assessment (cultural sensitivity, and funding support). For ease of reference they are reproduced in Table A1 and each associated question given a sequential number.

Table A1. Principles of research quality

Principles of quality	Associated questions
1. Conceptual framing	1. Does the study acknowledge existing research? 2. Does the study construct a conceptual framework? 3. Does the study pose a research question or outline a hypothesis?
2. Transparency	4. Does the study present or link to the raw data it analyses? 5. What is the geography/context in which the study was conducted? 6. Does the study declare sources of support/funding?
3. Appropriateness	7. Does the study identify a research design? 8. Does the study identify a research method? 9. Does the study demonstrate why the chosen design and method are well suited to the research question?
4. Cultural sensitivity	10. Does the study explicitly consider any context-specific cultural factors that may bias the analysis/findings?
5. Validity	11. To what extent does the study demonstrate measurement validity? 12. To what extent is the study internally valid? 13. To what extent is the study externally valid? 14. To what extent is the study ecologically valid?
6. Reliability	15. To what extent are the measures used in the study stable? 16. To what extent are the measures used in the study internally reliable? 17. To what extent are the findings likely to be sensitive/changeable depending on the analytical technique used?
7. Cogency	18. Does the author 'signpost' the reader throughout? 19. To what extent does the author consider the study's limitations and/or alternative interpretations of the analysis? 20. Are the conclusions clearly based on the study's results?

Each of the seven QA criteria has been mapped to the relevant 'associated question' in Table A1. Given the difference between the number of criteria and of associated questions, the former tend to be related to several of the latter. When scoring each of the assessed studies the unweighted score on each of the seven criteria was mapped to the related 'associated question' and summed.

Table A2. Quality assessment weighted scores on individual criteria

Study name	Quality assessment	Weighted ODI score	Assessment criteria						
			Research design	Familiarity with the literature	Rigour of causality assessment	Realism of assumptions made	Breadth of analysis	Appropriateness of data used	Appropriateness of estimation technique
López-Córdova et al., 2003	[P; OBS – quantitative; ↑]	32	3	3	6	3	2	9	6
Ando and Urata, 2011	[P; OBS – quantitative; ↑]	30	3	2	6	3	3	9	4
Jean, 2012	[P; OBS – quantitative; ↑]	30	3	3	6	3	2	9	4
Canadian Ministry of Foreign Affairs and International Trade, 2013	[P; OBS – quantitative; ↑]	29	2	3	4	3	2	9	6
Jean et al., 2012	[P; OBS – quantitative; ↑]	28	3	1	6	3	2	9	4
Péridy and Roux, 2012	[S; OR; ↑]	28	3	3	6	3	2	9	2
Parra Robles et al., 2012	[P; OBS – quantitative; ↑]	26	2	3	2	2	2	9	6
Athukorala and Kohpaiboon, 2011	[P; OBS – qualitative; →]	25	2	3	4	3	2	9	2
Ando, 2007	[P; OBS – quantitative; →]	23	2	2	4	3	2	6	4
Busse and Gröning, 2012	[P; OBS – quantitative; →]	23	3	3	2	3	2	6	4
Cheong and Cho, 2009	[P; OBS – quantitative; →]	23	2	2	4	2	2	9	2
Fu et al., 2012	[P; OBS – quantitative; →]	23	2	3	2	2	1	9	4
Tovias and al-Khouri, 2004	[P; OBS – quantitative; →]	23	2	2	4	2	3	6	4
Bergstrand et al., 2011	[P; OBS – quantitative; →]	22	1	2	6	2	1	6	4
Bustos, 2011	[P; OBS – quantitative; →]	22	2	2	2	2	1	9	4
Gordon, 2007	[P; OBS – mixed; →]	22	2	3	6	2	1	6	2
Francois et al., 2005	[P; OBS – quantitative; →]	21	3	2	2	2	2	6	4
Heng and Suu, 2009	[P; OBS – quantitative; →]	21	2	3	2	2	2	6	4
Nanto, 2010	[P; OBS – mixed; →]	21	3	1	2	2	2	9	2
Hoekman and Zarrouk, 2009	[P; OBS – mixed; →]	20	3	1	4	2	2	6	2
Kang, 2011	[P; OBS – quantitative; →]	20	2	1	4	2	3	6	2
Milton and Siddique, 2014	[P; OBS – quantitative; →]	20	1	2	4	2	1	6	4
Hirastuka et al., 2009	[P; OBS – quantitative; →]	19	3	1	4	2	1	6	2
Mahmood and Gul, 2014	[P; OBS – quantitative; →]	19	1	2	2	3	1	6	4
Malhotra and Stoyanov, 2008	[P; OBS – qualitative; →]	19	2	2	2	3	1	3	6
Takahashi and Urata, 2009	[P; OBS – quantitative; →]	19	2	1	4	2	2	6	2

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Study name	Quality assessment	Weighted ODI score	Assessment criteria						
			Research design	Familiarity with the literature	Rigour of causality assessment	Realism of assumptions made	Breadth of analysis	Appropriateness of data used	Appropriateness of estimation technique
Villarreal and Fergusson, 2014	[S; SR; →]	19	3	3	2	3	3	3	2
Göransson and Khaled, 2013	[P; OBS – quantitative; →]	18	1	3	2	1	1	6	4
Zhang, 2010	[P; OBS – mixed; →]	18	2	1	4	2	1	6	2
Colley, 2015	[P; OBS – quantitative; →]	17	1	2	2	1	1	6	4
Tan and Cai, 2010	[P; OBS – quantitative; →]	17	1	1	2	1	2	6	4
Hottenrott and Blank, 1998	[S; SR; ↓]	16	2	1	4	1	3	3	2
McDonald and Walmsley, 2003	[P; OBS – quantitative; ↓]	15	1	2	2	1	2	3	4
Slotmaekers and Vinhas de Souza, 2005	[P; OBS – quantitative; ↓]	15	1	2	2	2	1	3	4
Carvajal, n.d.	[P; OBS – quantitative; ↓]	14	1	2	2	1	1	3	4
Hunt, 2005	[P; OBS – qualitative; ↓]	13	1	2	2	2	1	3	2
Jackson, 2007	[P; OBS – qualitative; ↓]	13	1	1	4	1	1	3	2
de Oca, 2008	[P; OBS – mixed; ↓]	13	1	2	2	1	2	3	2
Tsolo et al., 2010	[P; OBS – quantitative; ↓]	13	1	1	2	1	1	3	4
Weisbrot et al., 2014	[P; OBS – qualitative; ↓]	13	1	1	2	1	3	3	2
Bae and Keum, 2013	[P; OBS – quantitative; ↓]	11	1	1	2	1	1	3	2
CCIC, 2012	[P; OBS – qualitative; ↓]	11	1	1	2	1	1	3	2
Malpani, 2009	[P; OBS – qualitative; ↓]	11	1	1	2	1	1	3	2
Reveles and Rocha, 2007	[P; OBS – mixed; ↓]	11	1	1	2	1	1	3	2
UNEP, 2004	[P; OBS – mixed; ↓]	11	1	1	2	1	1	3	2

APPENDIX B. THE CONTEXT OF THE FTA DEBATE – AUTHORS’ NOTE

The REA provides a summary of the evidence found in the literature on the *impact* of FTAs and the guidance that it gives on optimising the effects of new agreements. By definition it gives only limited space to issues on which the literature is wholly or largely silent. But, as explained in the main text, these gaps in the literature are on issues flagged as very relevant to impact in the debates and forecasts occurring during the negotiation and early implementation of FTAs between developed and developing countries.

The gaps are as important as the findings in judging ‘how developing countries might best benefit from new FTAs ... and how can they avoid harm’. And so is guidance on how the gaps might be filled in order to provide a full set of evidence for policymakers.

This Authors’ Note provides a brief introduction to the implications of key gaps on impact and how these might be filled. It is based on literature about FTAs that has not been formally assessed because, by its nature, it does not investigate impact. The key gaps identified in Section 3.5 are on the impact of FTAs on the fiscal regime of developing country partners, income distribution, employment, the environment and signatories’ ‘policy space’.

NEGLECTED ISSUES

Of these, the **fiscal impact** may rank as one of the most pressing early effects of an FTA in countries that rely on trade taxes for a significant part of government revenue. High tariffs tend to raise less revenue than modest ones (since they restrict the volume of imports) but goods facing modest tariffs are less politically sensitive to liberalisation. So it may often be the case that the tariffs which generate most revenue are liberalised first. This front-loading of the fiscal impact is accentuated in some EPAs with countries that combine formal tariffs with an array of trade-related fees and levies (such as many CARIFORUM states). Two risk analyses show for the Caribbean and Pacific EPAs (Stevens et al., 2009), and for the African EPAs (Stevens and Bilal, 2009) that the abolition of these ‘para-tariffs’ (typically within seven years) could produce substantial fiscal shocks in some states

It is not easy to explain the absence of analysis in the literature of the actual effects of an FTA on government revenue. Data at the required level of disaggregation to plot these effects do exist, albeit often only in the hands of governments, not researchers, and in some cases with major gaps. Although there are published data on revenue, they do not offer the required detail. What is needed are figures on the revenue actually collected by a country on imports from its FTA partner on each good that has actually been liberalised. In some countries with weak data collection the statistics may not be collected in the most appropriate form, but even so realistic estimates can be made of the timing and scale of fiscal impact as soon as the country’s detailed liberalisation schedule has been agreed.

Like any other change that affects the relative prices of goods and services, an FTA will have a **distributional impact** because it has differential effects on different groups of people. Analytically, a cut in the price of imports (to the extent that domestic markets are sufficiently competitive for it to be passed on) will tend to benefit consumers of those goods, who may be individuals or firms for which they are inputs. Individuals will gain directly in the

first case and, potentially, as employees, in the second. By contrast, individuals and firms (plus their employees) that produce domestically goods competing with the, now cheaper, imports will tend to suffer.

The failure of any of the assessed studies to estimate such domestic distributional impacts of the FTAs is perhaps not surprising. It requires a great deal of micro data, much of which is not available, to undertake systematically. Any given household may be affected in different ways according to the product that has been liberalised. And it is often far from clear how much of any cut in the border price is actually passed on to different markets rather than being absorbed by intermediaries. But the failure of the studies to address this issue is nonetheless remarkable, especially since FTA-induced change that is relatively small at the macro level could have significant distributional effects at the micro level (McCulloch et al., 2001). Hence, there could be significant distributional effects even in FTAs that are judged to have had only a modest impact overall.

If there were rigorous analysis of an FTA's actual distributional impact it would also begin to address the direct impact of the agreement on **labour and environmental standards**. As with the broader issue of '**policy space**', what is needed is a rigorous approach to constructing a counterfactual: what would have happened in the absence of the FTA. Is there evidence that FTA signatories were unable (for good or ill) to adopt new policies because they were prohibited in the treaty? Clearly such analysis would not fit easily into formal modelling, but it could be covered in qualitative and mixed methodologies, especially if undertaken by research teams that included political scientists as well as economists.

FILLING THE GAPS

It is probably unrealistic to expect the impact assessment of FTAs to provide full answers to the pressing issues raised in the second research question of 'how developing countries might best benefit from new FTAs (such as the EPAs) and how they can avoid harm'. The time scale is too long: by the time there is sufficient implementation and a sufficiently long trade time series, so much will have happened (or not happened) outside the narrow boundaries of the FTA that identifying exactly how any favourable or unfavourable developments have come about, and the role played by the trade agreement, involves many assumptions (and, hence, considerable scope for different researchers to reach conflicting conclusions). The agreements are too broad: they cover many goods but in a differentiated way, with the likelihood of having both inter- and intra-sectoral effects that can be hard to distinguish within a single study.

The impact literature can provide only a broad framework for policy-makers seeking guidance on how to maximise gains/minimise harm from newly agreed FTAs. It needs to be extended and focused by additional information obtained in a variety of ways. How might the gaps be filled to provide more precise guidance on how best to implement new trade agreements?

This review of the coverage and gaps in the literature suggests two, mutually compatible, approaches to extend the information that can be derived from the impact analysis.

- One solution is to undertake detailed analysis before strong data on 'impact' become available.
- The other is to cast the analytical net much more widely than a specific FTA when assessing the impact of liberal trade and trade-related policies.

RISK ANALYSIS

The first of these approaches would address the major gap in the literature on immediate post-signature analysis by extending and making more precise the findings of Type 3 studies. Such analysis would help to indicate which of the factors identified as important in the impact literature are present in the agreement and how quickly they will start to have an effect. They will help create a target list and timetable for efforts to support potential positive and offset potential negative effects.

Such analyses would still be forecasts (in the absence of impact evidence) but could be based on the details of what was actually agreed. They are particularly thin on the ground. There are four Type 2 studies in the database dealing with a single bilateral FTA which were published within a couple of years of the agreement entering into force. By virtue of when they were written (after the FTA details were known but before sufficient years had elapsed for a good impact assessment) they would have benefited particularly from including a detailed analysis of the policy changes actually agreed. But only one of these four (Dee, 2005) appears to do that.

The aim of such 'accurate risk analysis' is to identify in advance the areas where the FTA is most likely:

- to create opportunities, and whether these will be stymied by the absence of flanking measures; and
- to have negative consequences for poverty reduction, and whether these can be mitigated by adjustment support.

Once the precise details of the FTA have been agreed, such studies could identify in some detail: what will change most and soonest, which goods will be affected, which producers/consumers are dependent on these goods, and in what ways they might be helped to maximise any new opportunities/minimise new problems. They could also address how soon government revenue will be squeezed, whether it is realistic to put in place alternative taxes within this time period and, to the extent that it is, how the tax burden will change.

Examples already exist. One illustration of what is needed as a first step in providing such information for all of the interim EPAs is offered by Stevens et al. (2009) and Stevens and Bilal (2009), albeit on the basis of their provisions as at 2008 (so even these need to be updated). They suggest that the effects of the EPA will vary hugely between different signatories depending not only on the design and speed of liberalisation but also on the pattern of pre-existing trade. Some states will need to re-fashion existing policies to achieve desired policy goals, but the effectiveness and distributional impact of these alternatives may well be different from that of current policies. And the impact of the bilateral

commitments countries have made (albeit within 'regional packages') will depend partly on the behaviour of their neighbours in regional trade agreements.

One possible reason for the lack of such analysis in the reviewed studies is that resources are required for the detailed sorting of an agreement needed to identify areas of greatest sensitivity (in terms of the scale and character of agreed change). These are not substantial, but neither are they trivial. Given that an early post-signature analysis will be unable to assess actual impact, it may be unattractive for autonomous research by academics and, hence, will be undertaken if at all only if funds are made available for this purpose.

BROAD CAUSAL ANALYSIS

The second approach is to accept that the factors affecting the broader impact of an FTA are, indeed, far reaching, and to extend the horizon of impact studies accordingly. Instead of expecting the studies of specific FTAs to deal with all such influences, they should be used for what they appear from the surveyed literature to be good at: estimating in broad-brush terms the response of trade values (and, to a degree, sectoral composition) in countries that have signed FTAs. The broader analysis of why such changes have come about, and how they may have contributed to socio-economic and environmental developments, needs a wider canvas.

Such analysis is clearly needed. The defence of NAFTA noted in Section 3.5 is that the criticised actions were introduced before signature or were independent of the agreement. But this does not address the substance of the underlying critique that the wider policy stance of the government (of which NAFTA membership was simply one part) had adverse consequences for parts, at least, of the Mexican population.

Sector- or geographically-specific research needs to take an FTA as one of the factors, to be considered alongside others, in explaining observed changes. For example, the finding in Section 3.2.2.3 that much of the increase in Canadian–Chilean trade was in new, not previously exchanged goods gives rise to a whole set of follow-up questions which cannot realistically be answered within the confines of an FTA impact study (Canadian Ministry of Foreign Affairs and International Trade (2013 [P; OBS – quantitative; ↑]). What were these goods, who produced them, did they displace other products, and what was the effect on the communities involved in production?

It is responses to these questions that will contribute to a full answer to the second question posed by the REA. But such full answers would probably treat the FTA as just one of several factors producing the observed outcome. In a sense, the authors who treat FTAs as a symbol of wider government policies (Section 3.4) have a point. What is needed, judging from the literature surveyed for this REA, is for the task to be undertaken more rigorously and with greater discipline in establishing lines of causality.²¹

²¹ It should be noted that such rigorous studies may exist but, because they will cover FTAs only as one of many factors considered, it is likely that they will have been overlooked by the literature search defined by a focus on 'FTA impact'.

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