

## **International Production Networks: Policy Implications**

The "textbook" examples of IPNs are textiles, motor vehicles and electronics; the issue for us is that we can expect their success in those fields to be followed by others, especially food. Indeed, the OECD data shows that Food & beverages already has quite lengthy supply chains, but this probably reflects bottled preparations, sauces, and wine rather than meat and dairy produce. The *Coriolis* study for NZPECC shows that the supply chain of infant formula is longer and more complex than that for uht milk powder. It does not follow that New Zealand should abandon the latter for the former. The challenge of supply chains for us is preparation for the future rather than failure now.

“Supply chains”, “global value chains”, and “international production networks” are used synonymously.<sup>1</sup> I prefer the last, IPNs; “supply chains” are too readily interpreted exclusively in terms of physical infrastructure and logistics only, “global value chains” leads too readily to old ideas of “manufacturing in depth” and adding “value added” products without thinking of costs, whereas IPNs emphasises the way changes in trade are interrelated with business practice generally. IPNs are intimately linked to just-in-time manufacturing, exploiting inventory economies and, more important, employing modern high-pressure management. Any production interruption becomes a crisis for the network. The units of the IPN work with understood standards to achieve interoperability, and exploit innovation wherever in the production and distribution process it arises.

We can distinguish various levels at which IPNs pose challenges to the policy process. The challenge is large and immediate: “Any discussion today of international trade and investment policy that fails to acknowledge the centrality of global value chains (GVCs) would be considered outmoded and of questionable relevance.”<sup>2</sup>

### *The context for policy*

1. IPNs change the way in which policy commentaries should be framed and presented to the public so as to maximize the chance of public support for appropriate policy responses. We cannot hope to avoid “political noise”, especially the Tip O’Neill maxim, “all politics is local”,<sup>3</sup> but we can hope that political leaders, government and opposition and opinion leaders will seek to promote public understanding of what is actually happening in the global economy. Trade is no longer appropriately presented as making concessions about access to domestic markets in return for access to markets for exports. It is not even appropriately presented as satisfying consumer demand overseas where that is seen exclusively as the demand of final consumers, since intermediate goods make up a larger fraction of world trade. International trade should always begin from pictures of producers in different economies collaborating in order to service world markets. The aphorism, “my market in return for access to yours”, has given way to “my factories in return for your protection of my intellectual property rights”; it was created with Western Europe in mind, but provided it is understood as applying equally to foreign investors in Europe and North America, it is a useful introduction to the change of public opinion which should be promoted by political leaders and opinion-makers. The enormity of the task in New Zealand should not be underestimated. We still have business leaders whose formative years were in the age of a foreign exchange constraint when increasing exports per se was among the most prominent of policy objectives; we have even more business leaders who were convinced that their principal social obligation was to get close to final consumers overseas and deliver New Zealand products which satisfied their wishes. The change desired was that the right things should be put in boxes in New Zealand and delivered where they were wanted. That is very

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<sup>1</sup> Not always. Fukunari Kimura distinguishes them, reserving IPNs for networks with “speed and tight coordination among production blocks through swift service links”, not mere interconnections among producers. There will be differences of degree in individual cases rather than clear categories. F. Kimura in Deborah K. Elms and Patrick Low (eds) *Global value chains in a changing world* (Geneva: WTO, 2013, 978-92-870-3882-1, <http://www.oecd.org/trade/G20-Global-Value-Chains-2013.pdf>), p. 361.

<sup>2</sup> Elms and Low (eds) *Global value chains*, Foreword, p. xv; see also OECD, WTO, and UNCTAD “Implications of Global Value Chains for Trade, Investment, Development and Jobs” (Prepared for the G20 Leaders’ Summit, St Petersburg, September 2013), and Bernard Hoekman “Supply Chains, Mega-Regionals and Multilateralism: A Road Map for the WTO” *European University Institute Robert Schuman Centre for Advanced Studies Working Paper* RSCAS 2014/27 (March 2014).

<sup>3</sup> Cf Claude Barfield “Free trade in Asia: Obama at fork in road” *The National Interest* (12 February 2014).

different from collaborating in an international business working to combined standards and contributing to a final product which has no unique country of origin.

2. The OECD has especially emphasized that the relative growth of trade in intermediate products implies that exports need imports, and that conceptions of “export promotion” should give way to *trade promotion*. The notion that exports are good while imports are bad never made any economic sense but it is deeply embedded in popular attitudes in many countries. President Obama is only the most prominent of political leaders who still talk about promoting exports, and his rhetoric of pushing exports so as to promote American jobs could come straight from mercantilist pamphlets of the seventeenth century as though Adam Smith had never existed. But then “trade promotion” is not obviously economic sense either; the objective should be to use resources of all kinds, including labour, so as to maximise consumer welfare, choosing to employ international economic transactions where that is the mechanism which maximises the contribution to consumer welfare but not otherwise. However, we should probably eschew purism and settle for political and other leadership which promotes economic interdependence and does not privilege export promotion.
3. Similarly the OCED and WTO-IDE:Jetro databases of trade categorized according to value-added rather than gross value destroy any lingering belief that trade in services is a minor addendum to trade in goods. The average OECD economy has output consisting of about 75% of services and 25% of goods while traditional measures of trade suggest that trade is about 75% goods and only 25% of services. However, the value added compilations show that the major reconciliation between these apparently different measurements is through embedded services; most of the services which are internationally traded are embedded in the valuation of flows of goods. It is efficiency in all endeavours, whether services or goods-producing, that is important in the modern world; the Productivity Commission’s focus on productivity in services sectors is as important to trade competitiveness as it is to the efficiency of the internal economy. Again, the challenge to New Zealand community beliefs should not be underestimated. We have had many years of apparently favouring the production of goods for exports, reinforced by conventional rural beliefs about farming being the backbone of the country while cities, the home of services, are essentially parasites on hardworking farmers.
4. The rhetoric of “value chains” could easily revive misleading memories of past campaigns for “manufacturing in depth” or generating more “value added” in New Zealand. (We have GST rather than the international norm of VAT because politicians and PR experts feared VAT would be too puzzling given the popular belief that “value added” was something to be desired rather than a sin to be taxed!) “Moving up the value chain” sounds attractive, but it is fundamentally misguided. We should be sceptical of even the conventional statement in the marketing literature that the best returns are to be found in R & D and marketing, the opposite ends of a production chain, while making and assembling, the middle of the chain, offers only modest returns. Furthermore, creating new products or devising starting selling and PR campaigns carries social kudos not available to mere production management. The economic argument has some basis; where productivity improves fastest, relative prices decline, and output has to increase to earn the same absolute return. In very broad terms, productivity has increased fastest in recent years where mechanization has been most successful. There is no guarantee that this will continue forever and the simple story needs to be qualified by looking at the impact of ICT on services. In general, we should expect that rates of returns will tend to be equalized across any supply chain or IPN although variations in technical capability will create different relative contributions to the final selling price. Economic strategy should be directed towards New Zealand resources being used at any point of the IPN where they can contribute more to consumer demand than competing resources from another economy. It should not be made by preferring any point of the supply chain to any other. The *Coriolis* enquiry reports that in the supply chains traced, all producers earned the rewards they got. There is no easy money to be gained by capturing a particular part of the chain. Farmer complaints about gaining only a small part of the final consumer price are not useful economic analysis. Note that the recommended strategy may result in New Zealand investing overseas, such as in supply professional services to a final distribution component of dairy supply chain, as much as to manufacturing in New Zealand (as when turning simple dairy products in infant formula). The challenge to established ideas is very obvious.

5. This point deserves repetition. We want outward orientation not self-sufficiency. So we want NZ investment in the parts of chains located in China rather than uneconomic infant formula plants in NZ. If Chinese markets are determined by manipulated health professionals, we want appropriate competition laws (and implementation), not fruitless attempts to manufacture in NZ. Our competitive problem is that closeness to consumers is becoming more important - in old terms, we are seeing more industries whose location is consumer driven rather than being "footloose" or material driven. The strategic solution must be to have more NZ enterprise located overseas.

*The challenge to trade negotiators*

6. The challenge to trade negotiators is to discard a familiar and comfortable "formulaic" approach to economic integration. Negotiators start with trade in goods, conceived as trading concessions to national markets. They then follow a list of discrete chapters - services, with a similar offer and acceptance process, investment focused on national treatment, IP focused on the length of copyrights and patents, etc. The next agenda in this line of thought is the set of "trade ands" - environment, labour standards. This American agenda, designed to promote American exports, is not well adapted to a world of IPNs. IP needs to be approached through innovation promotion, reasonable and nondiscriminatory access to proprietary standards, people movement, logistics facilitation, capability-building to foster the development roles of IPNs etc. New Zealand negotiators need to be prepared for a different world.
7. Commentators frequently characterise trade negotiations as direct trading of concessions between economies – a reduction in my tariffs on your cars in return for lower tariffs levied by you on my dairy produce. Sometimes, the range under consideration may be widened; in the current TPP negotiations, US tariffs on Australian sugar in return for Australian acquiescence in investor-state dispute mechanisms or longer patent lives. But the simple picture survives. Negotiators tend to report their activities differently. Their incentives are to reach agreement, but they have to be able to “sell” the results of their labours to their domestic constituents, their political masters and local affected interests.<sup>4</sup> So the negotiations are more likely to be of the form, we can agree to that provided it is understood that..., and direct trade-offs are left to the final political judgments. Nevertheless, the process still involves defining what is important to an economy and what can mostly easily be surrendered in the pursuit of an overall agreement. IPNs necessitate changed expectations of what is most important, and a process of ensuring that domestic interests can correctly evaluate their interests in the contemporary international economy. (When the China-New Zealand FTA was being negotiated, a significant effort was put into enabling New Zealand firms to recognise how they would benefit from liberal regional rules of origin rather than seek to build a fence around the New Zealand market in the form of restrictive rules of origin.)
8. A new approach to services agreement is required. The practice of making agreements by “offer and acceptance” using traditional categorization of service sectors is not generating the required ability of IPNs to operate across borders. The current approach has been adopted simply by analogy with trade in goods agreements. But there is no reason why some other approach would not be more appropriate. Perhaps we should revive the effort to base sanitary and phytosanitary regulations on “sound science” and start from a position that a barrier to service trade identified by a trading partner should be removed unless it can be justified by a sound argument as appropriate and necessary. That may be utopian, but the basic idea is already inherent in the well-established requirement that interferences with trade must be “proportionate”, i.e. no greater than necessary to achieve a declared purpose. Services are both an especially important component of modern economic integration, the study of supply chains having revealed how much service content is embedded in goods traded internationally as well as the various forms of explicit trade in services across borders. This makes a major link between domestic policy aimed at improved productivity since the services sector is a large component of all economies, and negotiations about services show in stark relief the clash between a “trade perspective” that barriers should be removed and a “domestic regulatory” approach that consumers need protection. The clash is revealed rather than concealed by terminology such as that efforts

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<sup>4</sup> US TPP negotiators were recently reported as saying they "must have the flexibility to apply U.S. regulations as needed to continue to ensure safe food and to protect animal and plant health in the United States." "U.S. Shows Flexibility On TPP SPS, Now Open To Dispute Settlement" *Inside US Trade* (6 March 2014). They are not the only such negotiators.

should be directed to removing “unnecessary” barriers to the ease of doing business or that regulatory conversations should be aimed at removing barriers rather than “harmonizing” regulations.

9. IP should be reconceptualized as an agreement for managing appropriate innovation. The central issue should be recognised as finding the appropriate balance between rewarding inventing activity and making knowledge available to generate economic welfare. There should be collaboration with WIPO although while there has been some thinking about the meaning of “fair, reasonable and nondiscriminatory” access to proprietary standards, it too can be dominated by trade lawyers most concerned with extracting rents for existing property holders.
10. Provision for “small and medium enterprises” in economic integration agreements should be removed from the context of protection in the interests of domestic constituencies and explored as a way of ensuring that economies have appropriate access to IPNs. (The current emphasis on access to finance for SMEs is mostly misguided; SMEs can acquire finance if they have plans and proposals that make economic sense.) Developing economies most need their SMEs to be able to join IPNs as third- or fourth-tier suppliers; middle-income economies need to be able to have SMEs participate in the forming of IPNs across a wider range of industries, and advanced economies need their SMEs to participate in the R & D activities which inform an IPN. ERIA research<sup>5</sup> suggests that SMEs which are members of IPNs are more innovative, mostly in process innovations, than SMEs which do not belong to an IPN. The fear that IPNs reduce SMEs to “serfdom”, mere agents for decisions made elsewhere, is mostly misguided.
11. Taking a “development” rather than an “aid” approach to SMEs should be part of a wider embracing in economic integration agreements of the importance of reducing “development gaps” between economies and facilitating “inclusive” growth to address inequality within economies. There is an explicit link to the APEC Growth Agenda with its defined desirable characteristics of balanced, sustainable, secure, innovative and inclusive. The “co-operation” chapters of integration agreements should not be predicated on acquiescence and imitation in how things are done in developed economies, but genuine “learning together” in how economic growth and liberalization can promote economic and social objectives.
12. Trade negotiators have to go beyond incremental change. Deborah K Elms “The Trans-Pacific Partnership Agreement: Looking Ahead to the Next Steps” *ADB Working Paper 447* (23 December 2013), reports how the initial desire of TPP negotiators to focus on supply chain issues got overtaken by the appeal of the familiar: “Officials reached for the familiar settings of traditional chapters and the cluster approach was rapidly abandoned” (p. 4).
13. The composition of trade negotiation teams, and the skills required of “trade negotiators” are changing. IPNs have to be at the forefront, not an add-on to familiar agendas. Hoekman has commented, “Greater use of the WTO for deliberation on trade policy matters and learning from the experience of regional trade agreements, complemented by an effort to create greater space for new plurilateral agreements among groups of WTO Members, could help bolster the relevance of the WTO as a forum for multilateral cooperation on trade.”<sup>6</sup> It is not obvious that present trade negotiators are best placed to lead future negotiations.

*The challenge to policy more generally*

14. The same lesson can be generalised for those concerned with policy development in all sectors and portfolios. The contemporary world requires “public interest” to be conceived as having an international dimension. A great deal of public policy is concerned with designing and managing regulations which are designed to protect populations or defined population components all as part of creating a framework within which private self-interest can be expected to promote a social optimum. Regulators are led to see themselves as agents of the state protecting a national population. New Zealand has an especially long tradition since government enterprises were created in the nineteenth century to protect the “settler community” against predatory overseas interests, but in any case, it has for 75 years shared a common history in which governments employed regulators to distribute welfare “entitlements” among the qualified local population. Regulators often draw also on a legal tradition of seeing the law as protector of the “small person” against predatory governments.

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<sup>5</sup> e.g. <https://www.dropbox.com/sh/sfy4b9xfhrw7gb/X8G8cvru5z>

<sup>6</sup> Hoekman, “Supply chains” abstract and pp. 1-2.

15. Regulators are increasingly required to take a regional rather than national approach. The obligation may be explicit. Economic integration agreements increasingly extend to beyond the border barriers to trade. Competition authorities have to consider their impact on foreign suppliers as well as on domestic suppliers and consumers, investment authorities have to consider the meaning of “national treatment”, food safety authorities have to consider consequences for foreign suppliers as well as domestic constituents. All of these examples have grown over time – the widening agenda of economic interdependence extends back to the early 1960s and is not a new phenomenon – but these and even more familiar examples such as customs and ports management authorities providing accessible information continue to encounter new challenges in a world of IPNs. They culminate as negotiators try to deal with the general topic of “regulatory coherence”.
16. Regulators are often treated as separate entities whereas the interaction of different regulations may be what has most impact. “Matters are complicated by the fact that frequently multiple entities with different objectives have a role in setting and enforcing product and process regulations. In general, the design of regulations does not consider how taken together they may impact on SCT [supply chain trade].” Bernard Hoekman “Governance of Deeper Economic Integration in a Supply Chain World” (14 January 2014)<sup>7</sup>, p. 2. As with other key players, regulators need to reconsider the appropriateness of familiar ways of doing business. Hoekman suggests that to identify what stakeholders actually want regulators should use a variation of “deliberative democracy”, using a sample to see what the population would want if it were informed and engaged: “A variation of this process organized around ‘real-world’ international supply chains for goods and services, might help overcome entrenched differences between regulators by bringing in the stakeholders in whose name the regulations are set and defended.” (p. 12). It may be that this would be facilitated by acting in a context of international connectivity.
17. The implications of para 11 above for administrators of ODA are obvious, including as they do the need for greater mutual understanding between ODA managers and trade negotiators.

*Conclusion*

18. The essential challenge is that learning should displace familiar ideas throughout the “trade policy” area.
19. Particular demands are that “trade negotiators” should be up to date in their economic understanding, and policy analysts generally should know the obligations imposed on them by government’s international commitments.

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<sup>7</sup> Available at [www.eui.eu/Events/download.jsp?FILE\\_ID=5534](http://www.eui.eu/Events/download.jsp?FILE_ID=5534)