Global Value Chains & the Transatlantic Trade and Investment Partnership (TTIP)

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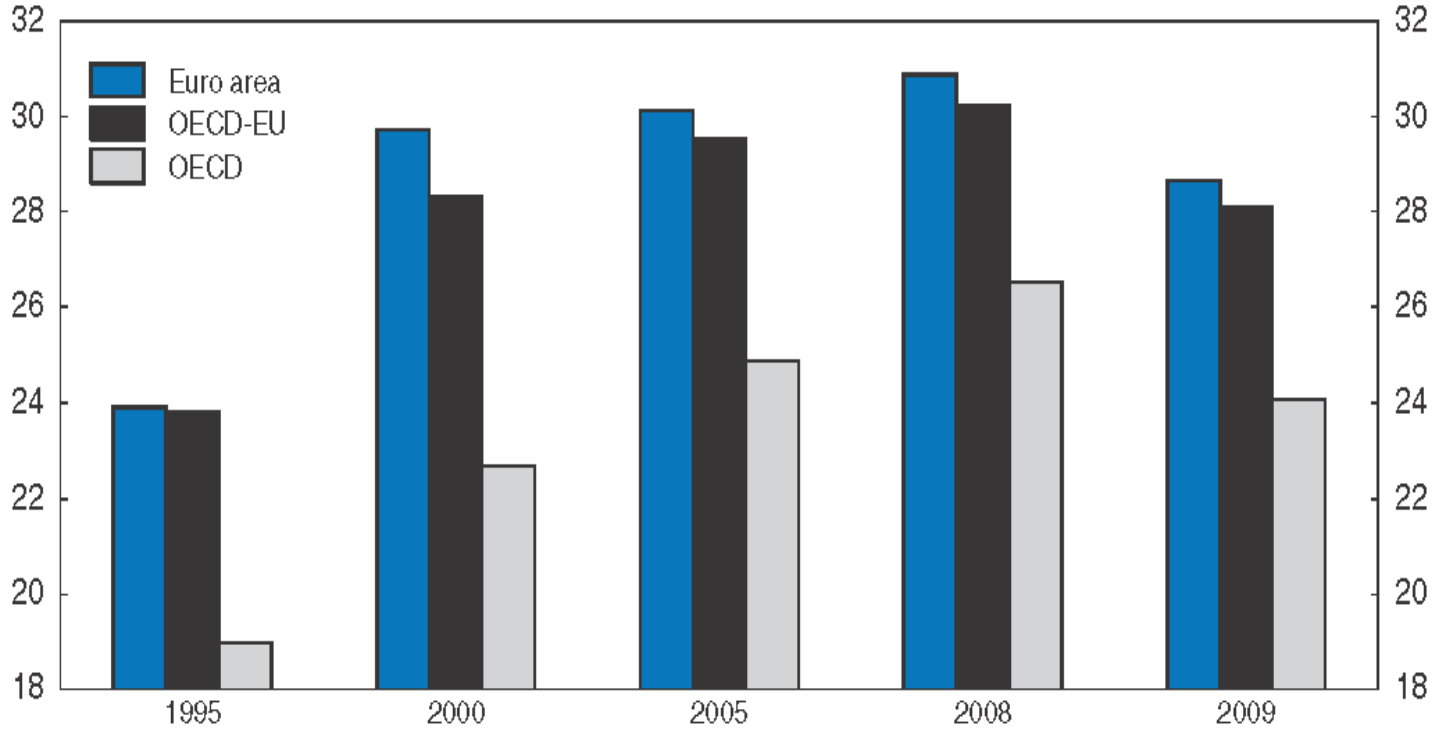
TTIP Official Web Links

- European Commission – Trade Policy: Focus on TTIP
- http://ec.europa.eu/trade/policy/in-focus/ttip/

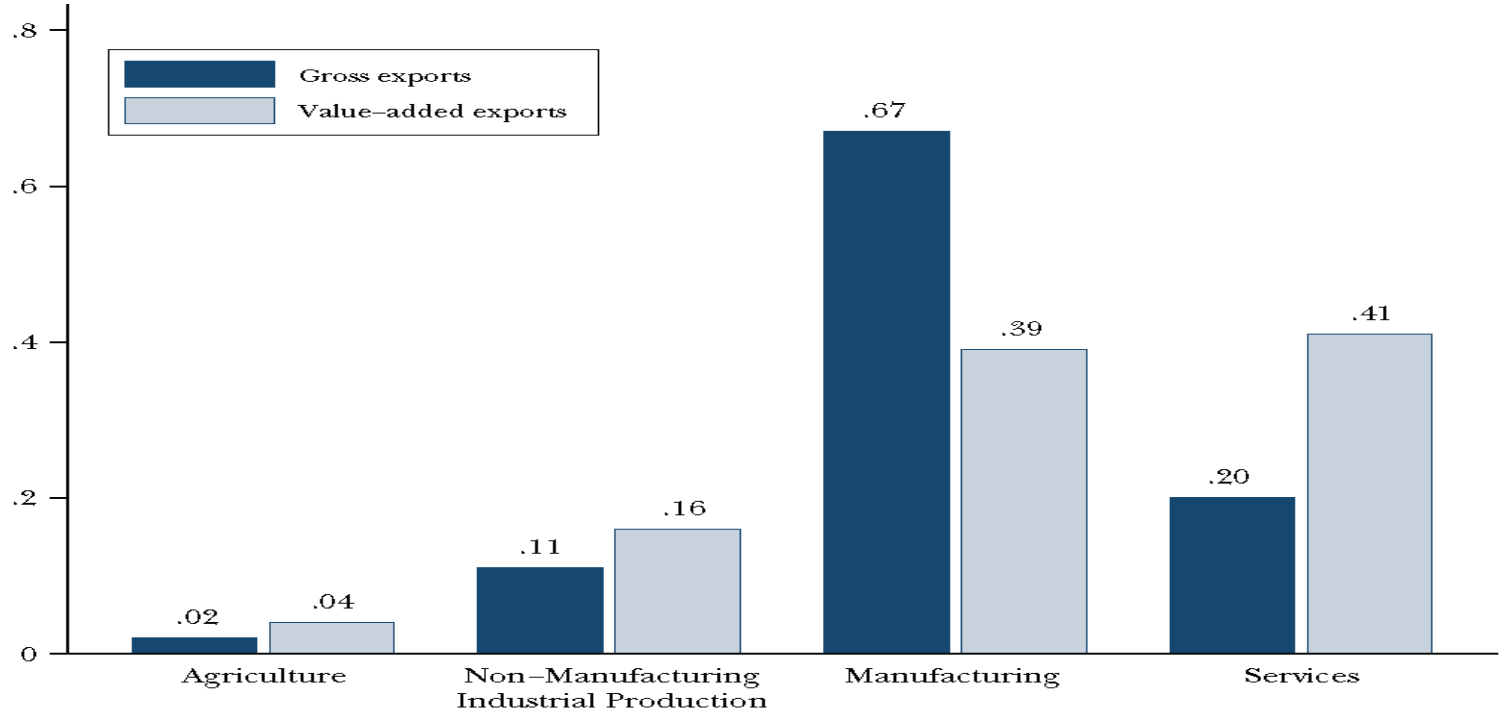
- Office of the United States Trade Representative – TTIP
- https://ustr.gov/ttip

Foreign Value-Added Content of Gross Exports



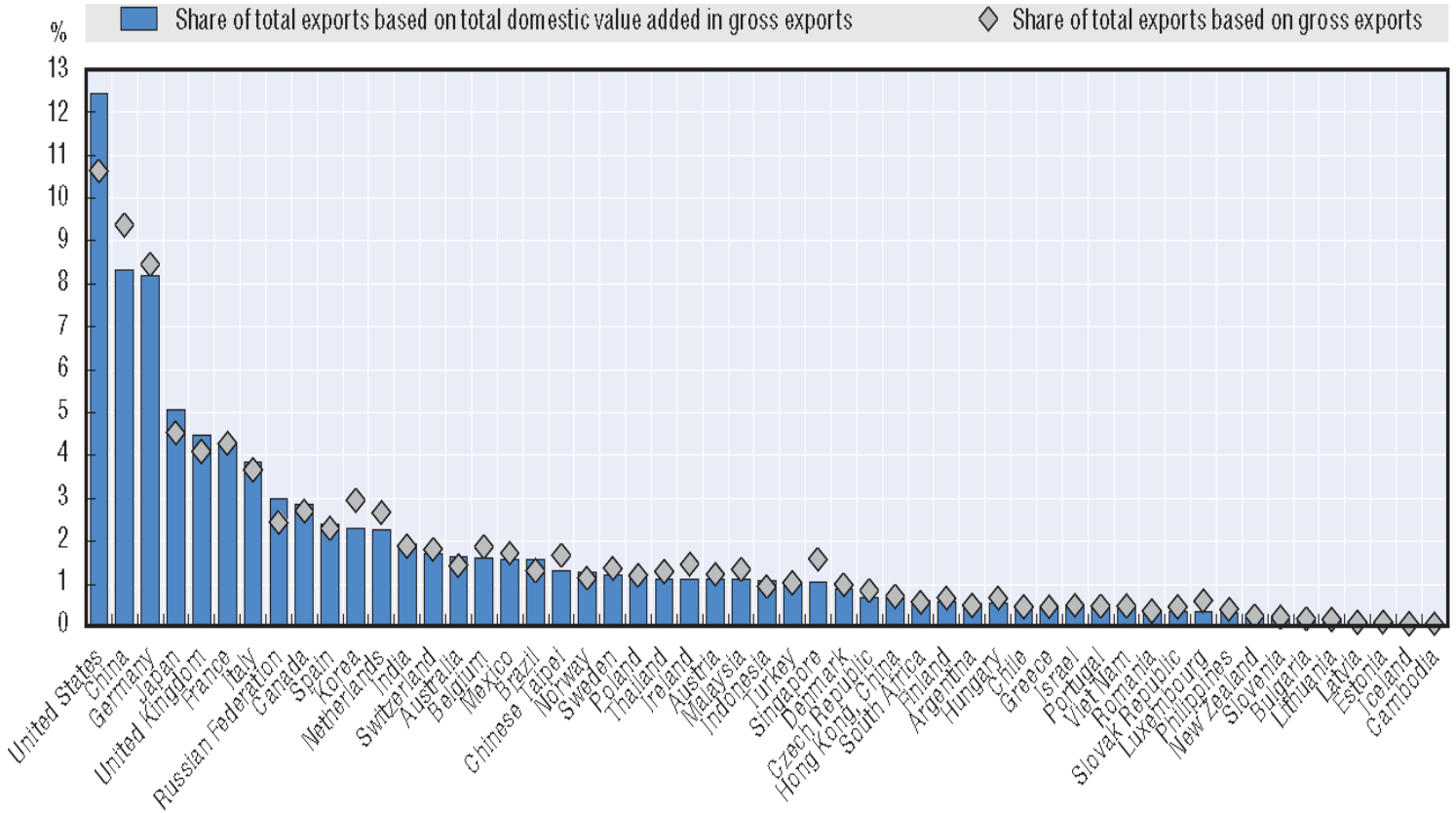
Source: OECD-WTO, *Trade in Value Added (TiVA) Database* and OECD calculations.

Sector Shares in Total Value-Added and Gross Exports



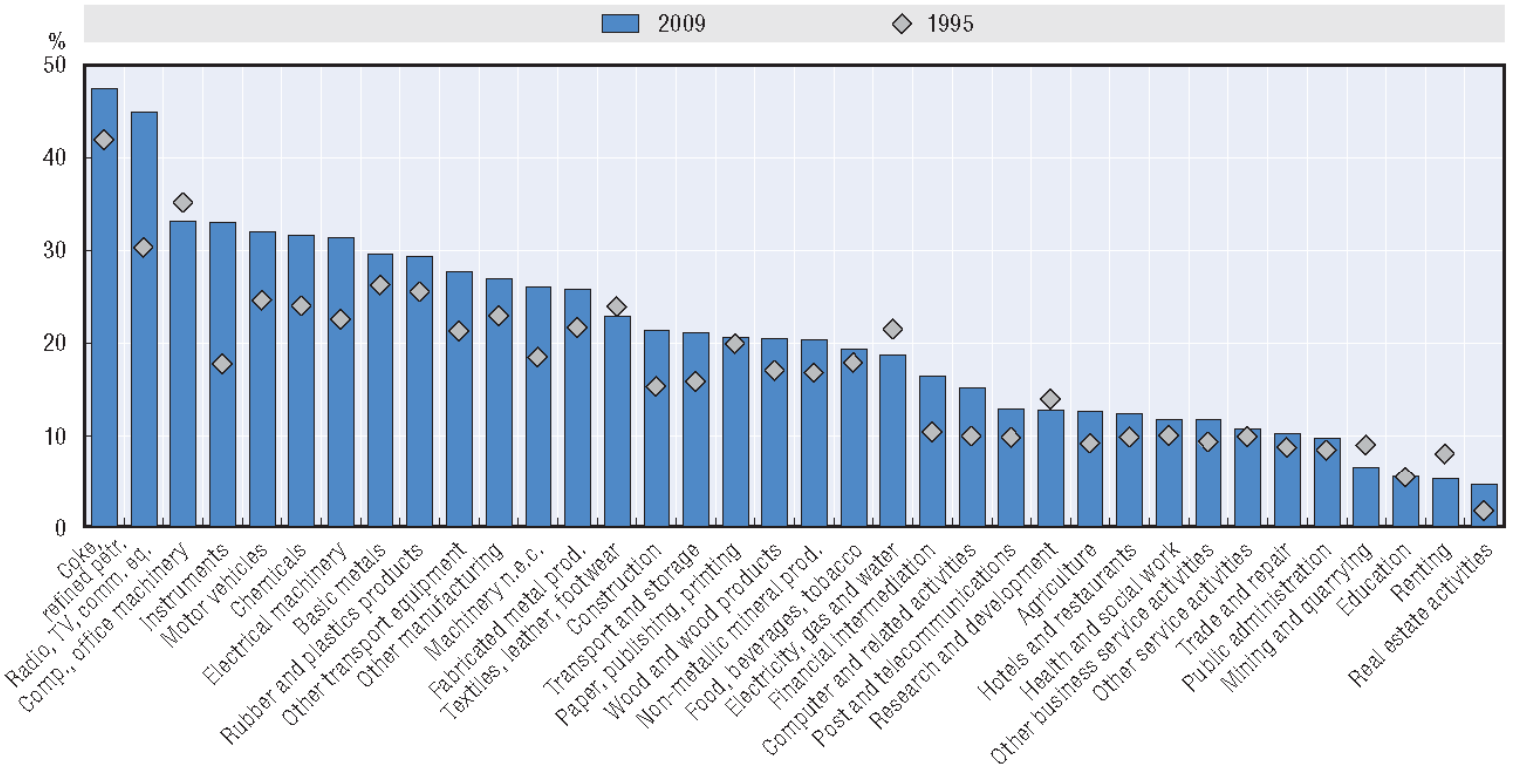
Sources: World Input-Output Database (WIOD).
Notes: Data are for 2008. Agriculture includes Forestry, Hunting, and Fishing. Non-Manufacturing Industrial Production includes Mining and Quarrying, Electricity/Gas/Water Supply, and Construction. Manufacturing is the remainder of Industrial Production.

Export Shares, 2009



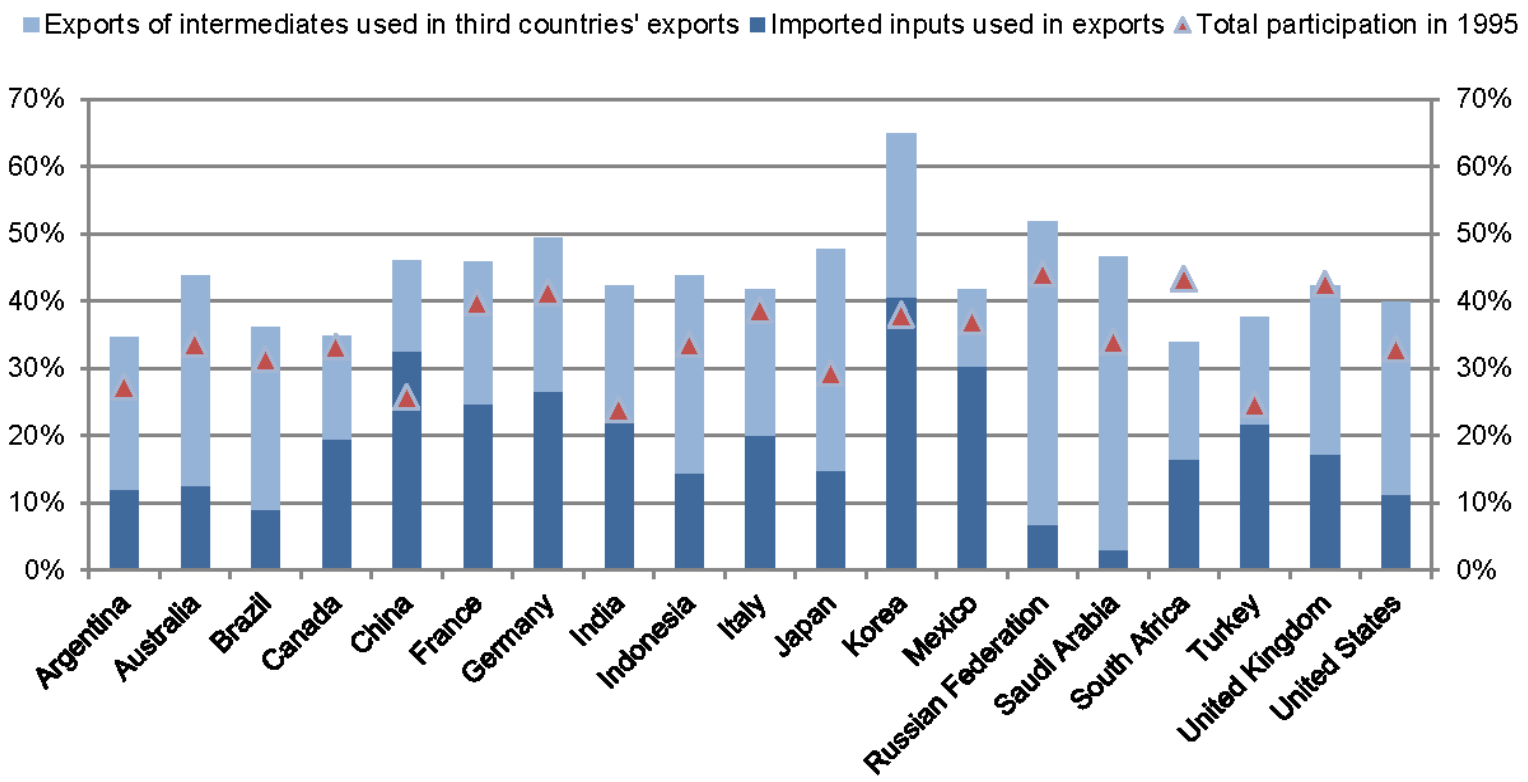
Source: OECD (2013), OECD-WTO: Statistics on Trade in Value Added, (database), doi: 10.1787/data-00648-en (accessed April 2013).

Foreign Value-Added Content of Exports by Industry, OECD average 1995 and 2009



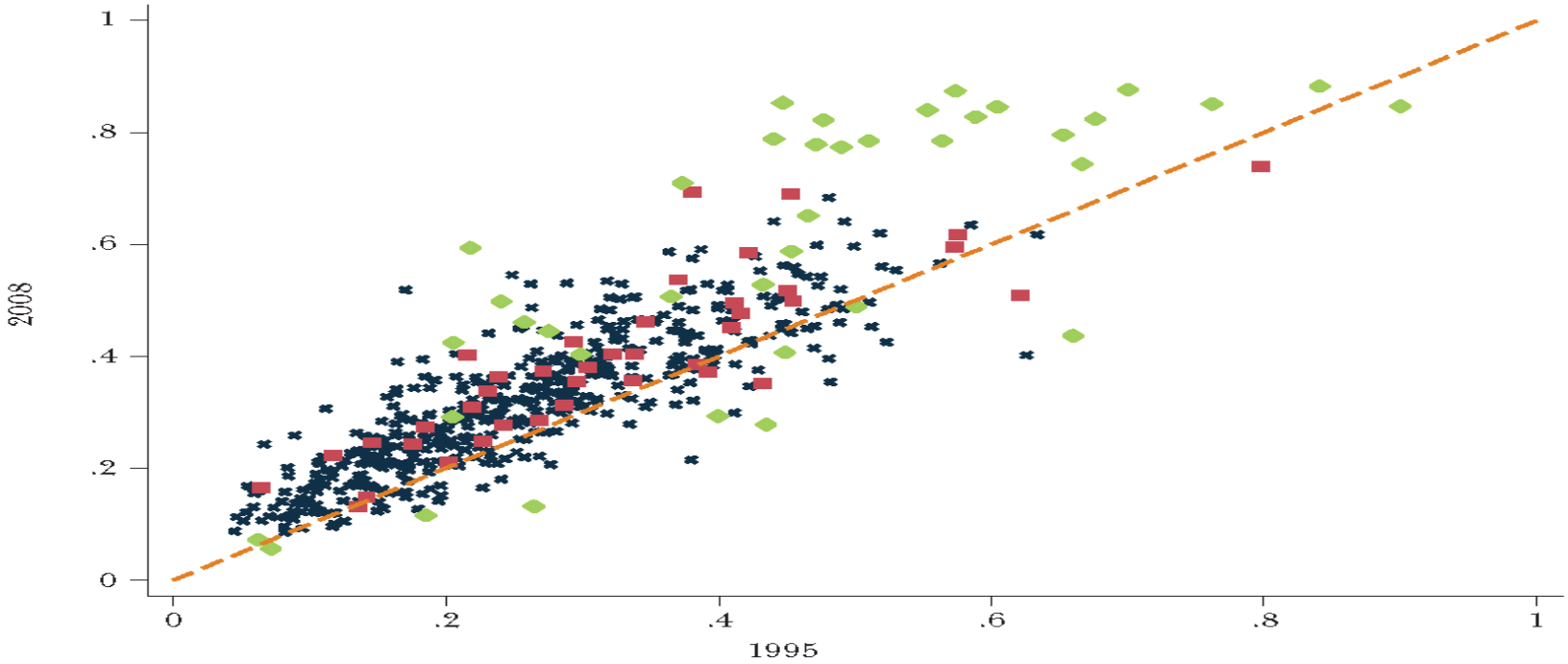
Source: OECD (2013), OECD-WTO: Statistics on Trade in Value Added, (database), doi: 10.1787/data-00648-en (accessed April 2013).

Global Value Chain Participation
1995 and 2009



The index is calculated as a percentage of gross exports and has two components: the import content of exports and the exports of intermediate inputs (goods and services) used in third countries' exports.
Source: OECD (2013a).

Foreign Value-Added Shares in 560 Global Value Chains, 1995 and 2008

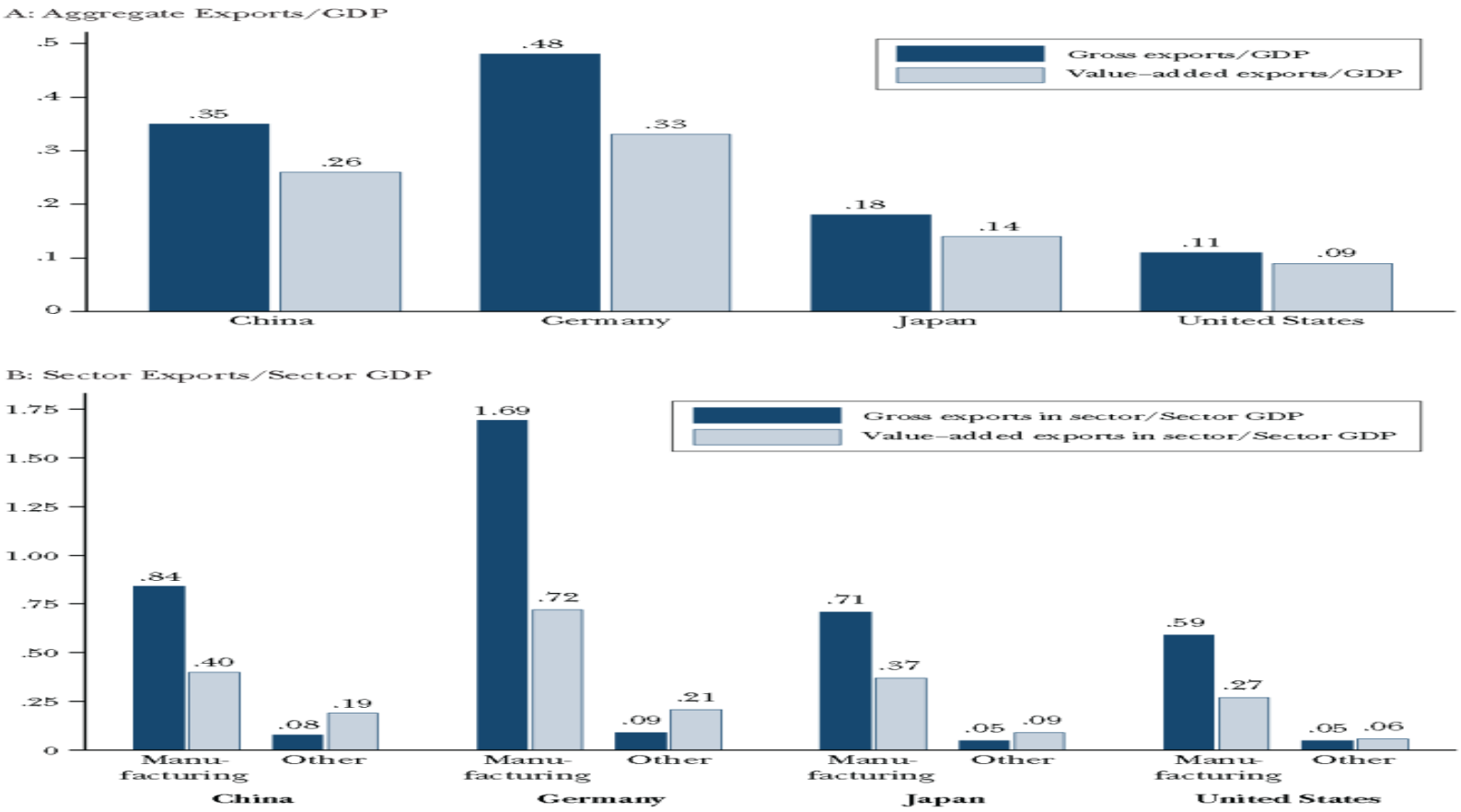


Source: Timmer, Erumban, et.al. (2014) from World Input-Output Database, November 2013 Release. *Notes:* Each dot represents the share of foreign value added in output of a manufacture's global value chain in 1995 and 2008. Shares are plotted for 560 global value chains, identified by 14 manufacturing industries of completion in 40 countries. Red squares indicate global value chains of electrical equipment (ISIC rev. 3 industries 30–33), and green diamonds indicate petroleum refining (ISIC 23). The dashed line is the 45-degree line.

Public Datasets for Research on Value-Added Export

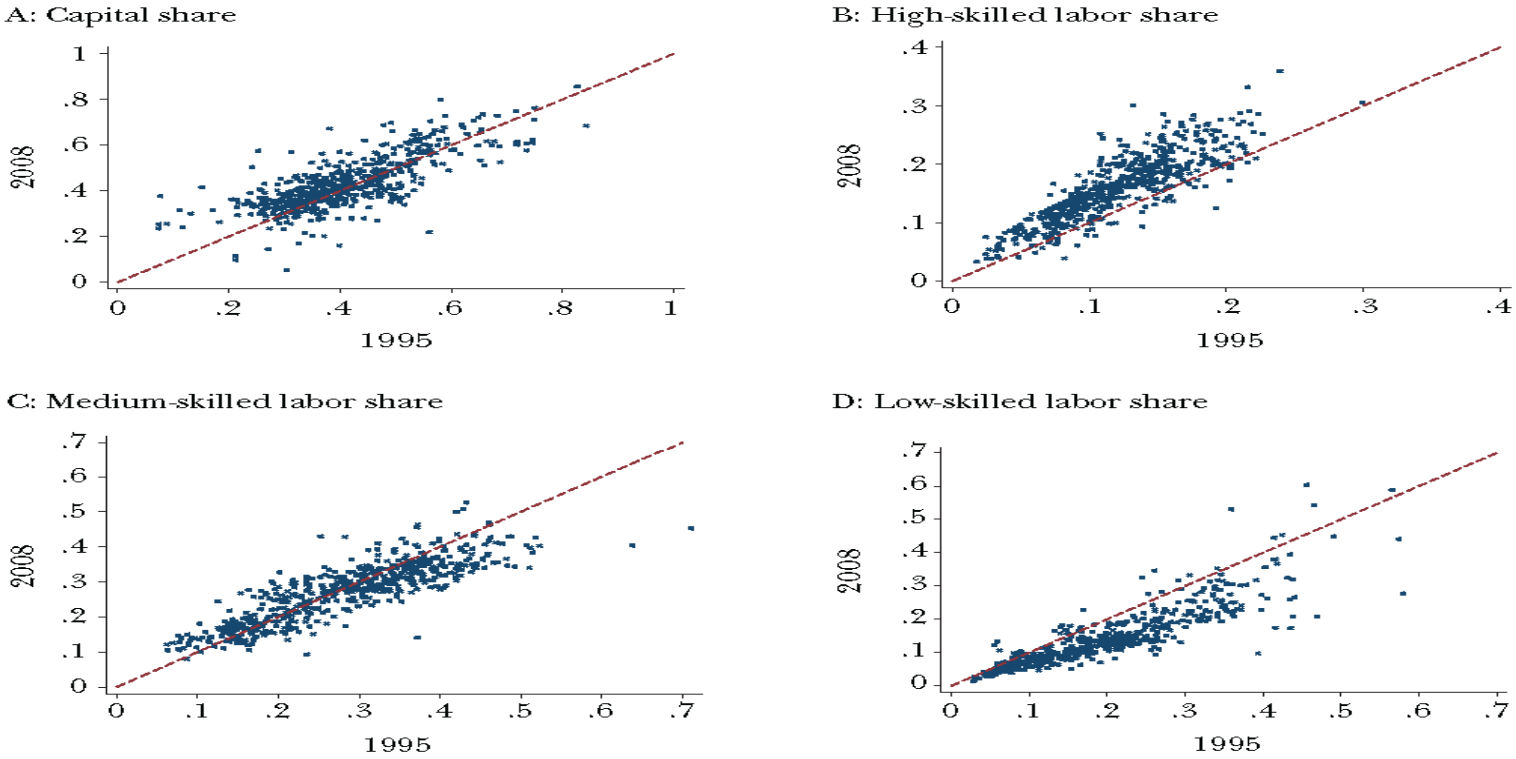
Name of dataset	*Key features*
Global Trade Analyis Project Database	Input-output tables for over 100 countries for various benchmark years, mostly after 2000. https://www.gtap.agecon.purdue.edu
World Input-Output Database	Global tables covering OECD countries and major emerging markets from 1995–2011. http://www.wiod.org
IDE-JETRO Asian Input-Output Tables	Regional tables covering 8 East Asian countries at five-year intervals between 1985 and 2000. http://www.ide.go.jp
WTO-OECD TiVA Database (Trade in Value Added)	Value-added exports and other measures of global supply chain activity for 57 countries in 1995, 2000, 2005, 2008 and 2009. http://stats.oecd.org
OECD Input-Output Tables	Input-output tables for OECD countries and major emerging markets, available various years from 1970–2005. http://www.oecd.org/trade/input-outputtables.htm

Aggregate and Sector-Level Openness for Top Four Exporting Countries



Sources: World Input-Output Database (WIOD).
Notes: Data are for 2008. The category labeled "Other" includes all nonmanufacturing industries.

Factor Shares in Value-Added of 560 Global Value Chains of Manufactures,1995 and 2008



Source: From Timmer,Erumban, et.al. (2014) based on World Input-Output Database, November 2013 Release.

Notes: Factor shares in value added of 560 global value chains, identified by 14 manufacturing industries of completion in 40 countries, in 1995 (x-axis) and in 2008 (y-axis). The dashed line is the 45-degree line.

Factor Shares in Global Value Chains of Manufactures, by Regions

Value-added in value chains of manufactures	*1995*	*2008*	*2008 minus 1995*
In high-income countries (billion US$)	**$4,863**	**$4,864**	**$1**
By:			
capital (%)	35.9%	38.7%	2.9%
high-skilled labor (%)	16.8%	21.8%	5.0%
medium-skilled labor (%)	33.3%	30.3%	−3.0%
low-skilled labor (%)	14.0%	9.1%	−4.9%
In other countries (billion US$)	**$1,723**	**$3,820**	**$2,097**
By:			
capital (%)	55.2%	58.4%	3.2%
high-skilled labor (%)	5.4%	7.1%	1.7%
medium-skilled labor (%)	15.6%	17.0%	1.4%
low-skilled labor (%)	23.8%	17.5%	−6.3%
Worldwide (billion US$)	**$6,586**	**$8,684**	**$2,098**

Source: Timmer, Erumban, et.al. (2014) based on World Input-Output Database, November 2013 Release.
Notes: Shares of production factors in total value added in a region, based on all global value chains of manufactures. Value added by a region is sum of value added by labor and capital on the domestic territory. High-income countries include Australia, Canada, and the United States; Japan, South Korea, and Taiwan; and all 15 countries that joined the European Union before 2004. Value added and expenditure is at basic prices (hence excluding net taxes, trade, and transport margins on output). It is converted to US dollars with offi cial exchange rates and deflated to 1995 prices with the US Consumer Price Index. Figures may not add due to rounding.

Changes in Factor Shares 1995–2008 in Global Value Chains of Manufactures, by Country

	Capital	*Low-skilled labor*	*Medium-skilled labor*	*High-skilled labor*
United States	3.9	−1.9	−5.9	4.0
Japan	4.5	−5.4	−2.1	3.1
Germany	6.8	−2.8	−7.4	3.4
France	0.2	−8.7	0.1	8.4
United Kingdom	−3.4	−8.0	1.2	10.2
Italy	−1.1	−14.8	10.4	5.5
Spain	0.1	−12.9	4.7	8.1
Canada	1.8	−2.0	−4.6	4.8
Australia	6.0	−8.4	−0.9	3.3
South Korea	9.3	−11.6	−5.6	8.0
Netherlands	5.5	−7.3	−7.1	8.9
Total all high-income	**2.9**	**−4.9**	**−3.0**	**5.0**
China	9.3	−9.3	−2.1	2.0
Russian Federation	1.1	−1.6	−2.4	2.8
Brazil	−6.7	−4.8	7.5	4.0
India	4.5	−5.9	−1.7	3.1
Mexico	6.4	−4.2	−0.5	−1.7
Turkey	−12.7	4.5	5.2	3.1
Indonesia	5.3	−8.1	1.3	1.6
World minus all high-income	**3.2**	**−6.3**	**1.4**	**1.7**
World	**6.5**	**−3.8**	**−4.2**	**1.5**

Source: Timmer, Erumban, et.al. (2014) based on World Input-Output Database, November 2013 Release.
Notes: See Table 3. In this table, the percentage point changes in factor shares are given for each country. Changes in four factors for each country add up to zero by definition, but here they may not due to rounding. Countries are ranked by GDP.

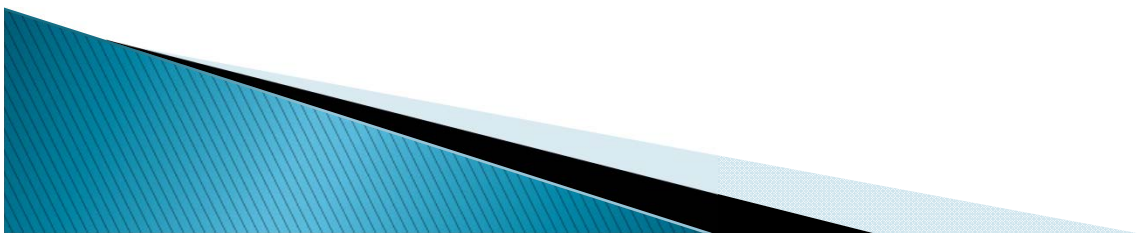
Implications for Trade Policies

- Multilateral market opening is superior to discriminatory arrangements. Barriers between third countries, which might lie either upstream or downstream in GVCs, can be as troubling as barriers between direct trading partners. With TTIP the opening of Canadian and Mexican markets via NAFTA and within the EU single market offer potential gains for GVCs which are significant.

- GVCs are built around high quality and efficient service providers and these service providers can account for as much as half or more in the value-added of exports. For example, high-quality logistics can impact trade more than physical distance or direct transport costs. Development of competitive service providers relies on dynamic workforce development and continuous updating of telecommunications systems.

Implications for Trade Policies

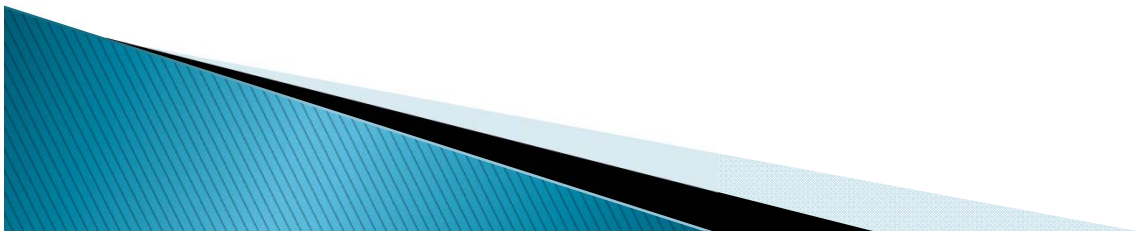
- Regulatory cooperation including product standards, certification, and inspections can help control compliance costs. These costs include not only direct outlays to be in compliance but the opportunity costs of delays or inspections to certify compliance. Mutual recognition and/or harmonization in these areas have great potential to lower barriers and the payoffs may be particularly high in terms of the opportunity for small and medium enterprises to link into GVC networks. Given the size of the US and EU economies, agreement on a significant set of common product standards should give advantages in building competitive GVCs located within the aggregate transatlantic partnership. And this movement toward widespread standardization may be maintained as a first-mover advantage in the global economy's trade and investment system.



Implications for Trade Policies

- Participation in GVCs can provide technology and knowledge spillovers which can significantly improve the productivity and degree of specialization for a firm opening up additional opportunities for trade and investment. And this can also open up capital funding opportunities with contractual or ownership relationship within GVCs. FDI can be a new and important capital financing source for the domestic partners and subsidiaries of foreign multinational enterprises.

- The domestic economy can capture sizable benefits from exporting even with a very large share of exports by foreign affiliates of multi-national enterprises. The OECD has documented that more than half of the value-added to the domestic economy by foreign affiliates is via the labor income channel paid to domestic workers. This means that the domestic economy can benefit considerably from such sources of FDI.

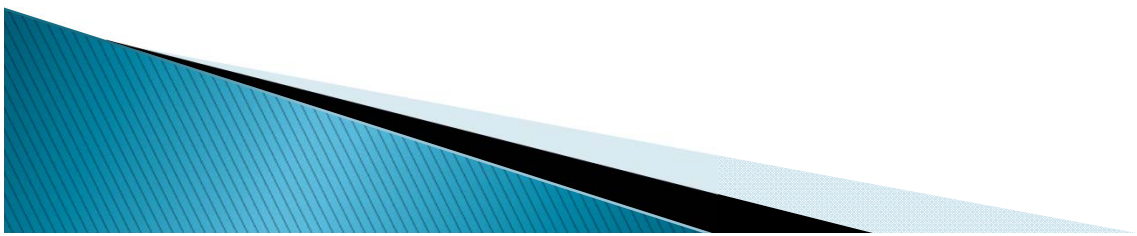


Implications for Trade Policies

- As GVCs permeate the global economy a larger proportion of a given country's employment and output becomes more dependent on non-domestic demand and the continued successful operations of GVCs. Countries become more interdependent with consequent increasing exposure to external risks. While some of these risks can be effectively mitigated on a microeconomic basis, the increased systemic partnership insures more commonality of sharing in the costs and benefits of changes inducing global reactions. This is already a reality but it should be put in a proper perspective. For example, employment potentially displaced by lowering trade and investment barriers is only a very small fraction of the total domestic employment base which has become more dependent on existing foreign operations and the value-added component of GVC-based exporting. In effect the benefits from increased growth potential should be expected to significantly exceed the sectorial adjustment costs. The focus should be on building effective adjustment programs, particularly those focused on labor markets.

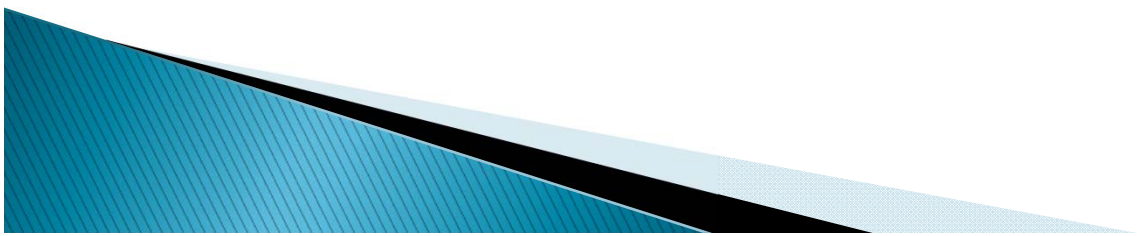
Implications for Trade Policies

- Given the complexity of GVCs and flexibility in internal transfer pricing schemes we have seen multinational enterprises shift the proportions of their gross operating surpluses across borders. Jurisdictions which have seen surpluses being exported to gain differential advantages through the heterogeneous nature of corporate tax systems are unhappy. Current efforts to address this tax base erosion and profit shifting have the potential to be undermined by tax competition across jurisdictions. This is a problem built around the design of tax systems to support public expenditures while maintaining accepted standards of equity. But it should be noted that the solution to this problem needs to be based in better tax policy and trade policy is not the appropriate instrument of control.



Implications for Trade Policies

- Perhaps the most important lesson is that there is no turning back on GVCs; the genie is out of the bottle, and firms' successes will be tied to their participation in these supply webs. This means that we must take a new view on imports as a very large portion are not finished products which seek to compete with finished domestic products but rather will be passed downstream via the export market to continue in GVC value-added networks. Increased competition in any market will be opposed by incumbents within the market who have enjoyed monopoly or monopsony power. We should expect those who will suffer declines in the economic rents they have captured in the past to oppose change but we should not be deterred in recognizing the potential for overall efficiency gains to be realized.



Summary

- Significant opportunities exist in the TTIP negotiations to strengthen the growth and development opportunities of the transatlantic economy particularly in the dimension of reducing non-tariff barriers by harmonizing product standards and opening up the market for services. Significant roadblocks continue to exist in plainly understanding the tradeoffs. The goal should be clearly stated in terms of the higher importance of moving toward more uniformity of standards rather than focusing on arguments about pushing the level of protection under the standards in a particular direction. There are also a number of key difficulties in opening the financial services marketplace. Most of the controversy is grounded in the approach to regulatory functions, operations, and dimension as both the US and the EU have not done a good job of coordinating their approaches to the recognized major regulatory restructuring needed in the post financial crisis era.