Wolf Hassdorf \*

#### Abstract

The U.S. administration, negotiating the Trans-Pacific Partnership (TPP), is faced with a novel trade policy demand by U.S. industry: to include provisions against currency manipulation. This demand comes mainly from the U.S. car makers and targets Japanese exchange rate policies. The extraordinary focus of the U.S. automotive sector on currency disciplines in the TPP is puzzling. The puzzle cannot be sufficiently explained by Open Economy Politics (OEP), the main stream IPE approach which deducts domestic sectoral preferences from standard international trade theory. The car industry does not stand out from other U.S. manufacturing sectors which are export- and import competing with Japan. However, it stands out as a sector involved in a unique struggle with its Japanese counterpart for improving its global investment position. Japanese policies to weaken the yen have resulted in Japanese firms reaping massive windfall profits. This allows Japanese auto makers to challenge U.S. manufactures' market share by expanding their global and regional production networks through boosting FDI. The profitability and investment dimension of exchange rate vulnerability is specific to the automotive sector's organization of production in global value chains. Profitability concerns explain why it is especially the U.S. auto makers which push for an inclusion of currency disciplines in the TPP. OEP analysis proved insufficient to identify the importance of the global investment-trade link in this specific case because of its reductionist approach relying on conventional models of neo-classical trade theory.

**Key Words:** Trans-Pacific Partnership (TPP), currency manipulation, US trade policy, automotive sector, global value chains (GVCs), Open Economy Politics.

<sup>\*</sup> Associate Professor, College of International Relations, Ritsumeikan University

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The U.S. administration, currently negotiating the Trans-Pacific Partnership (TPP), regional trade agreement (RTA) with eleven Pacific Rim countries including Japan, is faced with a novel dimension of trade policy pressures by U.S. industry and their backers in the Congress: to include provisions against 'currency manipulation' or risk rejection of the final agreement in the U.S. legislature. The link between exchange rate policies and trade policy is nothing new. Major industries in the U.S. manufacturing sector have long pressed for the government to identify the exchange rate policies of major trading partners such as China or Japan as "currency manipulation" in order to justify countervailing protectionist measures. However, the TPP negations are the first instance that key industries oppose and U.S. Congress threaten to block a major international trade agreement if currency provisions are not included. Currency manipulation has entered the policy debate as a potential stumbling block for the TPP.<sup>1</sup>

The two East Asian nations frequently accused of currency manipulation by U.S. policy makers are China and, to a lesser extent, Japan. Since TPP negotiations exclude China, but include Japan, it is Japan's exchange rate policies what the currency manipulation issue within the TPP debate is really all about. Among U.S. manufacturing sectors competing with Japan it is the U.S. automakers which most forcefully demand those disciplines. Ford executive Joe Hinrichs, speaking at the 2014 Chicago Motor Show, demonstrates the concerns of the U.S. auto firms:

"the real elephant in the room now is currency manipulation, and we need to make sure that it is not ignored. It represents the major trade barrier of the 21st century — and it must be addressed in any future U.S. trade agreements."<sup>2</sup>

The extraordinary focus of the U.S. automotive sector on currency disciplines in their lobbying on the TPP is puzzling. Why is the automotive industry, *in difference to other manufacturing industries exposed to trade with Japan*, spearheading this policy demand?

<sup>1.</sup> See *The Washington Post*, 13 November 2013, For controversial trade pact, fire from the left, the right and WikiLeaks. Available from < http://www.washingtonpost.com>. Accessed 20 October 2014.

<sup>2.</sup> Quoted in MLive. 7 February 2014. Ford exec: Currency manipulation 'real elephant in the room. Available from http://www.mlive.com.

"Currency manipulation" is a polemic rendering of "competitive devaluation", a monetary strategy of mercantilist trade policy.<sup>3</sup> Competitive devaluation, the deliberate intervention by a government to lower the value of its currency, supports the country's traded goods sector by acting both as an import barrier and export subsidy. Such intervention by monetary authorities manipulates the foreign exchange market in pursuit of beggar-thy-neighbor policies towards a country's trading partners. It often triggers demands for countervailing protectionist measures in the domestic politics debate of these trading partners.<sup>4</sup>

In International Political Economy (IPE) the Open Economy Politics (OEP) approach has systematically investigated the exchange rate preferences of domestic interest groups.<sup>5</sup> Theoretical arguments on sectoral preferences, derived from international monetary and trade economics, are put to the test by rigorous empirical analysis.<sup>6</sup> OEP analysis establishes that industry sectors exposed to exchange rate volatility will respond to the depreciation of competitor nation's currencies with protectionist demands. Starting from predictions deduced from international economics, Broz and Werfel, employing rigorous statistical analysis, confirm a causal link between of protectionist demands of U.S. industry sectors exposed to exchange rate volatility and U.S. dollar appreciation.<sup>7</sup> In the first sections of this paper I apply the OEP approach to explain why it is the U.S. car industry, in contrast to other industries, which chose to home in on Japanese currency as a make-or-break issue of the TPP. Surprisingly, the OEP approach does not solve the puzzle. The unique policy concerns of the U.S. auto makers with the issue of Japanese competitive devaluations are insufficiently explained by deducting industry preferences from standard international trade theory. To explain the unique lobbying profile of the U.S. auto makers they have to be understood as globally operating MNEs, as international investors focused on building global value chains (GVCs). I conclude that OEP, as it stands, is limited in its explanatory power by conceptualizing domestic interest group preferences to

<sup>3.</sup> See Bergsten and Gagnon 2012.

<sup>4.</sup> The demands for countervailing duties by members of the U.S. Congress in response to Chinese interventionist management of the external value of the renminbi are the most obvious example. See *Reuters*, 5 June 2013, Senators renew push against China currency 'manipulation' despite yuan's rise. <a href="http://www.reuters.com">http://www.reuters.com</a>. Accesses 20 October 2014.

<sup>5.</sup> The classic OEP-type study is Frieden 1991.

<sup>6.</sup> For an overview of OEP, see Lake 2006.

<sup>7.</sup> Broz and Werfel 2014.

narrowly in national lines. It misses out on the phenomenon of competition for global market share through global investment and production strategies. The domestic politics approach of OEP has to take "globalization" more seriously.

The study investigates the puzzle as follows: in the next section I will map out the political-economy rationale for addressing an international monetary issue, currency manipulation, within a trade agreement, the TPP. In section three I will establish the empirical puzzle: that it is specifically the U.S. automotive sector which lobbies for a currency clause in the TPP, in contrast to other U.S. industries competing with Japanese counterparts. Section four will apply the OEP approach to explain the car makers' specific concern about currency manipulation. It will demonstrate that OEP analysis, deducing industry preferences on exchange rate policies from economic theory, cannot explain the preoccupation of the U.S. auto makers with Japanese currency manipulation. Section five will shift the focus of the investigation away from theoretical models to the actual concerns voiced by the car makers. It investigates the idiosyncratic policy demands of the "Detroit Three" (GM, Ford, Chrysler) by starting from their oligopolistic competition for global market share. In this process car firms, operating global value chains (GVCs) of production, compete through large scale international investment linked in with intra-industry trade, rather than simply through exports and import penetration. The section finds that Japanese yen depreciation, because it results in massive windfall profits for Japanese car makers, puts U.S. auto makers at a disadvantage vis-à-vis their Japanese counterparts in respect to their global investment position. The profit and FDI-boosting effect of Japanese exchange rate policies for Japanese car firms explains why America's automotive MNEs are focusing on currency manipulation in their TPP lobbying effort. The conclusion comments on the limitations of the OEP approach.

#### Demands for currency disciplines in the TPP trade agreement

The link between exchange rate policies and trade policies is at the heart of the charges of currency manipulation brought against major U.S. trading partners by U.S. policy makers, legislators and domestic pressure groups. The U.S. Treasury Department describes currency manipulation as "countries manipulat[ing] the rate of exchange between their currency and the United States dollar for purposes of preventing effective balance of payments adjustment or gaining unfair

competitive advantage in international trade".<sup>8</sup> Economically speaking, the trade effects of currency manipulation parallel those of a uniform import tariff and export subsidy (Staiger and Saykes, 2008). Academic research on the problem of currency manipulation focuses mainly on its contributing role to unsustainable global imbalances: the growing trade deficits of the U.S., and the growing build-up of U.S. dollar reserve holdings in the surplus countries.<sup>9</sup> Especially international economists associated with the Washington Peterson Institute for International Economics argue that the massive interventions by mainly East Asian governments in the foreign exchange markets in recent years was undertaken to keep their currencies undervalued and thus boost their international competitiveness. Bergsten (2014a) maintains that without the currency manipulation of its trading partners "the United States could see its current account deficit cut by \$200 billion to \$500 billion per year and its unemployment rolls drop by 1 million to 5 million" (p. 28).

The question of how the problem of currency manipulation can be addressed effectively has engendered strong demands for reforms to international economic governance, especially the governance of international trade. Narrowly defined, currency manipulation is a monetary issue, falling into the remit of the IMF. More broadly, as a substitute for import barriers and export subsidies, it is linked to international trade. The obvious forum to address the issue would be the IMF, in the context of its monitoring and reporting of currency misalignments, or the WTO, as a trade-related policy matter. IMF provisions on currency misalignments, however, are vague and weakly enforced. WTO agreements do not include currency provisions. However, if currency provisions were included in trade agreements, they would offer effective enforcement via their disputed settlement bodies and the threat of countervailing measures.<sup>10</sup> Against the backdrop of the shift of the center of gravity of international trade negotiations from the deadlocked WTO to regional trade agreements, the current policy debate aims at the inclusion of a currency clause into the major regional trade agreement

<sup>8.</sup> Office of International Affairs, U.S. Treasury, 2014, 2.

<sup>9.</sup> The currency manipulation explanation of global imbalances, defined as large current account imbalances, emphasises mercantilist behaviour by the East Asian trading partners of the United States (Bergsten and Gagnon 2012, Gagnon, 2012, 2013; Bergsten, 2014). Other explanations include trends in saving and investment balances, a U.S. productivity surge, the global saving glut, and distortions in financial markets (Chinn, 2011).

<sup>10.</sup> For a review of possible solutions to how to address currency manipulation, see Bergsten, and Gagnon, 2012.

currently negotiated by the United States in the Asia-Pacific region, the TPP.

According to the Peterson Institute, currency provisions would fit well into a TPP agreement. Firstly, the TPP aims to be a "high-quality, 21st century" preferential trade agreement (PTA). It goes way beyond traditional PTAs by proposing a state-of-the-art trade liberalization agenda reflecting the growing linkages between trade, investment, global supply chains and behind-the-border regulatory issues. TPP would extend to trade-related issues such as the protection of intellectual property rights, incoming foreign direct investment, provisions against the preferential treatment of state-owned enterprises, and coherence of national regulatory regimes.<sup>11</sup> In addition, modelled on KORUS, the Korea-U.S FTA effective since 2012, TPP promises to include trade-related labor and environmental standards. Given the wide ranging remit of the TPP on complex trade-related issues makes, why not incorporate a chapter on currency manipulation? As Bergsten (2014b) argues, "it would thus be anomalous if such agreements failed to include the currency topic, which is clearly more important quantitatively than any of the other issues being considered. Currency is politically sensitive in many countries but no more than other items being negotiated" (p. 9).

A chapter on currency in the TPP would have to offer a clear definition of what constitutes currency manipulation and practical procedures of how it should be addressed. The Peterson Institute suggests that the definition of currency manipulation in trade agreements should meet a two-part test: "maintenance of significantly undervalued exchange rates inter alia through extensive intervention in the currency markets."<sup>12</sup> They propose identifying a case of currency manipulation by three key variables: "excessive" levels of foreign exchange market intervention, "excessive" current account deficits, and "excessive" accumulation of reserve.<sup>13</sup> Interventions would have to be identified as serving the purpose of competitive devaluation. Other monetary (and fiscal) policies measures affecting the exchange rate, such as official interest rate policies and quantitative easing (QE), would be excluded. QE, even if it results in the depreciation of a country's currency, is considered to be a legitimate macroeconomic policy tool, primarily serving domestic policy purposes such as stimulating growth, employment, or

<sup>11.</sup> See Elms and Low, 2012.

<sup>12.</sup> Bergsten 2014a, 20.

<sup>13.</sup> See Bergsten, 2014a, for a detailed discussion of these variables and of what constitutes "excessive" in this context.

raising levels of inflation. However, as Bergsten points out, currency manipulation has complex dimensions beyond the simple accumulation of foreign exchange reserves. It can include "oral intervention", attempting to influence market sentiment by talking the currency down, or monetary policy measures which outwardly target domestic variables, but implicitly aim at competitive depreciation. Obviously, such policies are hard to target with a currency chapter in the TPP which has to provide contractual clarity. However, they might be discouraged by the possibility that allegations of currency manipulation could result in a case being brought against the accused party in a future TPP dispute settlement mechanism.

The Peterson institute accepts that, by its own definitions, Japan's current monetary and exchange rate policies do not constitute a case of currency manipulation. This is in line with the latest report by the U.S. Treasury investigating major U.S. trading partners for currency manipulation, which explicitly exonerates Japan (Office of International Affairs, U.S. Treasury, 2014). Although Japan holds the world's second largest foreign exchange reserves and has a history of competitive devaluations through currency intervention, it has abstained from foreign exchange intervention for three years. In recent G-7 and G-20 statements, Japanese officials have ruled out intervention as a monetary policy tool.<sup>14</sup> The recent substantial depreciation of the yen on a trade weighted basis resulted not by intervention but from the massive increase in domestic money supply via the policy of QE as part of "Abenomics", initiated by the Abe administration and the Japanese central bank since 2012. Officially Abenomics targets domestic inflation and not international competitiveness. However, as David Pilling put it succinctly in the FT: "It is a truth universally acknowledged that a weak yen is good for Japan. It is a truth mostly unacknowledged – at least in Tokyo, where it is nonetheless secretly understood – that a weak currency is a vital plank of Shinzo Abe's plans to reflate the economy."<sup>15</sup> Consequently the Peterson Institute maintains that Japan should be put on the "watch list" as a potential currency manipulator (Bergsten 2014b).

As to the question of how cases of currency manipulation could be addressed

<sup>14.</sup> Office of International Affairs, U.S. Treasury, 2014. As of September 2014, the IMF valued Japan's currency reserves at U.S. dollar 1.2 billion (IMF, 2014).

<sup>15.</sup> David Pilling. A weak yen is no panacea but Shinzo Abe needs it all the same. *Financial Times*, 15 October 2014. Available from <a href="http://www.ft.com">http://www.ft.com</a>. Accessed 25 October 2014.

and remedied, the Peterson Institute offers a range of steps in line with the usual provisions in RTAs and the WTO for the settlement of trade disputes. First an aggrieved country would bring a case of alleged currency manipulation by another member country to the TPP dispute settlement panel. If this country was found to be in violation of the currency chapter rules and failed to accept the recommendations by the dispute settlement panel, countervailing measures would be permitted. Such measures could be countervailing currency intervention or traditional trade policy measures such as countervailing duties on imports from the violating country to the aggrieved country (Bergsten and Gagnon, 2012). In short, a currency clause in the TPP promises not only to rule out clearly defined currency manipulation policies, but would to provide effective enforcement mechanisms.

U.S. auto makers and their allies in congress have adopted the arguments put forward by the Peterson Institute and are pushing strongly for an inclusion of currency rules into the TPP.<sup>16</sup> The mobilization of the congress by the auto makers has been impressive. Since mid-2013, the Obama administration faces increasing pressure from a bipartisan majority in both Houses, the House Ways and Means Committee and senior lawmakers in the U.S. Senate, demanding that currency manipulation is addressed in the TPP.<sup>17</sup> In addition, 22 House Republicans and House Democrats threaten to oppose the renewal of Trade Promotion Authority (TPA), preciously now as Fast Track Authority (FTA).<sup>18</sup> Trade Promotion Authority (TPA) restricts Congress to a simple up or down vote on a future TPP deal, increasing the chances for smooth ratification. If the policy demands on addressing currency manipulation in the TPP prevented a renewal of TPA, it could become a make-or-break issue for the ratification of the trade pact by the U.S. legislature.

Although the U.S. car industry draws on academic arguments to lobby for a currency clause in the TPP, the academic debate about the causes of global

<sup>16.</sup> *The Wall Street Journal*, 13 November 2013, U.S. Auto Makers Push for Currency Provisions in Asia-Pacific Trade Pact. Available from < http://online.wsj.com>. Accessed 25 October 2014.

<sup>17.</sup> See letter by 230 House lawmakers to President Obama of 6 June 2013. Available from <http://michaud.house.gov/press-release/majority-house-members-push-obama-addresscurrency-manipulation-tpp>; Letter by sixty U.S. Senators to Treasury Secretary Lew and U.S. Trade Representative Forman of 24 September 2013. Available at <http://www.stabenow.senate. gov/?p=press\_release&id=1171>;

<sup>18.</sup> *Financial Times*, 12 November 2013, House Republicans oppose fast-track authority on trade deals. Available from < http://www.ft.com>. Accessed 25 October 2014.

imbalances the question whether Japan qualifies according to rigorous definitions of currency manipulation those definitions matters little. Their concerns are of a practical nature: the competitiveness gains of their Japanese counterparts due to the recent drastic depreciation of the yen against the dollar by about 40 percent. From an auto industry point-of view, Japanese monetary policy action resulting in a weakening yen constitutes a major threat as it manipulates key international prices, regardless of the wider domestic intentions of Abenomics. As the Financial Times put it, commenting on the letter on currency manipulation and the TPP sent by U.S. senators to President Obama: "Although the letter does not specifically mention Japan, it reflects growing anger on Capitol Hill and among American manufacturers, particularly US carmakers, at the devaluation of the yen under the new economic policies of prime minister Shinzo Abe."<sup>19</sup>

The industry stance on currency manipulation and Japan has evolved over time. Until 2013 their case was straightforward: The monetary component of Abenomics to weaken the yen in an attempt to revive the Japanese economy was considered to constitute unacceptable currency manipulation which should be met by reciprocal measures.<sup>20</sup> When the Japanese currency broke through the 100 yen to the U.S. dollar level in May 2013, the U.S. car makers' main industry association, the American Automotive Policy Council (AAPC), did not mince words, stating that "the depth of Japanese currency manipulation has reached a new low. Japan's monetary policies aimed at weakening the yen continue to boost Japan's economy ... at the expense of its trade partners. Japan should not be included in the Trans-Pacific Partnership."<sup>21</sup>

However, over the last year the U.S. car industry, as a mater of political expediency, has adopted the narrow definition of what constitutes currency manipulation proposed by the Peterson Institute which avoids accusing Japan directly. A key statement of late 2013 by the AAPC demands broadly that the

<sup>19.</sup> *Financial Times*, 24 September 2013, Currency manipulation should be part of trade talks. Available from <a href="http://www.ft.com">http://www.ft.com</a>>. Accessed 25 October 2014.

<sup>20.</sup> See interview of Matt Blunt, president of the American Automotive Policy Council, with Reuters. Reported in *Reuters*. 17 January 2013. Automakers urge U.S. fight Japan's action to weaken yen. Available from <www.reuters.com>. Accessed 10 November 2014.

<sup>21.</sup> AAPC. May 2013. AAPC Statement on Japan's Currency Hitting 100 Yen to the U.S. Dollar. Available from <a href="http://s3.amazonaws.com/assets.clients/aapc/aapc/media/906/AAPC%20">http://s3.amazonaws.com/assets.clients/aapc/aapc/media/906/AAPC%20</a> Statement%20on%20Japan%E2%80%99s%20Currency%20Hitting%20100%20Yen%20to%20 the%20U.pdf?1368134524%20target=\_blank>. Accessed 10 November 2014.

manipulation of exchange rates by a TTP member should be prohibited in the TPP agreement and proposes the inclusion of a text which defines currency manipulation in terms of large-scale intervention, net accumulation of foreign exchange reserves and prolonged current account surpluses.<sup>22</sup> The new policy stance brings industry demands in line with the clearly defined proposals for a realistic currency clause in the TPP suggested by trade negotiation experts. However, the industries' main concern remains Japanese exchange rate policies and yen depreciation.

## The puzzle: the U.S. car makers' unique concern with currency manipulation

Industry specific concerns about exchange rate policies vary. Exchange rate volatility matters more for the producers of tradable goods and services than those of non-tradable goods (Frieden 1991). Movement of the yen vis-à-vis the dollar affect mainly those sectors which compete strongly with Japan. However, their policy demands regarding the TPP and currency manipulation map out quite differently. As the following section will establish, only the automotive sector is seriously concerned about the issue.

U.S. trade with Japan is dominated by the manufacturing sector. In 2012 manufactured goods accounted for 50 percent of total U.S. exports to Japan and for 82 percent of total Japanese imports to the United States.<sup>23</sup> The principal U.S. manufacturing sectors exporting to Japan, were chemicals, aerospace, computers and electronics/electrical equipment, and machinery and equipment.<sup>24</sup> The principal Japanese manufacturing sectors importing to the United States were cars and car parts, machinery and equipment, computers and electronics/electrical

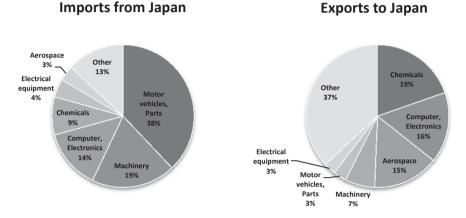
24. Sectors by North American Industry Classification System (NAICS) industry codes.

<sup>22.</sup> AAPC. To Ensure a Level Playing Field, US Automakers Support the Inclusion of Strong, Enforceable Currency Provisions in the Trans-Pacific Partnership. Available from <a href="http://www.americanautocouncil.org/tpp">http://www.americanautocouncil.org/tpp</a>. Accessed 10 November 2014.

<sup>23.</sup> The trade and gross output data in this section (if not sourced otherwise) are from the following sources: Source of Trade Data: Foreign Trade Division, U.S. Census Bureau, 'Global Patterns of U.S. Merchandise Trade'. Available from <http://tse.export.gov/TSE/TSEHome.aspx>; Office of the United States Trade Representative. Japan (29 April 2014). Available from < http://www.ustr.gov/countries-regions/japan-korea-apec/japan>; Bureau of Economic Analysis, (BEA), U.S. Department of Commerce, Gross-Domestic-Product-(GDP)-by-Industry Data, last updated July 25, 2014. Available from <http://www.bea.gov/industry/gdpbyind\_data.htm;> ; Own calculations. Sources accessed on 15 October 2014.

equipment, and chemicals (see Figure 1). The trade pattern represents a typical picture of intra-industry trade among industrial countries. Trade in the automotive sector is heavily asymmetrical in favor of Japan.

Figure 1: Manufacturing Trade between the U.S. and Japan by Sector, 2012



Source: Foreign Trade Division, U.S. Census Bureau; Bureau of Economic Analysis, (BEA), U.S. Department of Commerce.

I systemically screened statements by their main industry associations, listed by the U.S. Department of Commerce to measure to what degree the main U.S. manufacturing sectors competing with Japan are concerned about currency manipulation in their policy demands regarding TPP.<sup>25</sup> The associations' web pages were searched by the key word "TPP" for postings on the TPP. The postings were then analyzed for content and coded by nodes representing key policy demands regarding TPP. Nodes indicative of industry demands to address Japanese currency policies in the TPP are "Currency Manipulation", "Market Access" and "Focus on Japan".<sup>26</sup> The coding results are presented in Table 1. They

<sup>25.</sup> The web pages of the main U.S. Industry Associations listed by SelectUSA were accessed via the SelectUSA web page on 15 November 2014: U.S. Department of Commerce: SelectUSA: Industry Snapshots. Available from <a href="http://selectusa.commerce.gov/industry-snapshots">http://selectusa.commerce.gov/industry-snapshots</a>. Only industry associations which posted statements addressing the TPP on their web pages were included in the survey. Although the industry sectors covered by the Department of Commerce do not match the NAICS sectoral coding used in this paper, they are broadly in concordance.

<sup>26.</sup> The nodes are: currency manipulation; market access: tariff and non-tariff trade barriers (NTBs); focus on Japan; opposition to the TPP without Japanese action on market access; high-quality 21<sup>st</sup> century agenda; support for TPA.

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indicate a unique concern of the U.S. car industry with the participation of Japan in the TPP and the issue of currency manipulation.

Table 1: U.S. Manufacturing Industry Associations: Policy Statements onthe TPP (as of November 2014)

	Number of TPP Statements which							
U.S. Industry Associations (Parentheses: No. of Statements addressing the TPP)	demand addressing Currency Manipulation	demand addressing Market Access (Tariffs, NTBs, Regulatory Issues	focus on Japan	demand Delay of the TPP until Japan concedes market access	demand full '21 <sup>st</sup> Century Agenda' (Regulatory coherence, IPR)	support Renewal of TPA		
Automotive								
American Automotive Policy Council (AAPC) (90)	66	43	45	40				
Motor & Equipment Manufacturers Association (MEMA) (58)	7	19	16	6	2			
Machinery & Equi	Machinery & Equipment							
Association of Equipment Manufacturers (AEM) (14)		2	1		2	8		
Association for Manufacturing Technology (1)	1		1					
National Electrical Manufacturers Association (NEMA) (12)		5	1		5	1		
High Tec and Medi	High Tec and Medical Technology							
Advanced Medical Technology Association (AdvaMed) (4)		3			3			
TechAmerica (4)		3	1		3	1		
Chemicals								
American Chemistry Council (ACC)(6)		1	2		1	1		
Society of Chemical Manufacturers and Affiliates(6)		1			1	4		
Semiconductors	No Statements on the TPP							
Aerospace	No Statements on the TPP							

The focus by the U.S. automotive sector on issues related to Japan when commenting on the TPP is extraordinary. Whereas other sectors, when mention Japan, do this mainly to point out that it is important to support the TPP as a major project of Asia-Pacific regional trade integration, the U.S. automakers emphasize that support for a TPP including Japan is conditional first of all on that Japanese currency manipulation and market access to Japan are sufficiently addressed. The AAPC, the main industry body of the U.S. car makers, posted 66 statements demanding strong and enforceable disciplines on currency manipulation, referring either directly or indirectly to Japanese exchange rate policies. In addition, a substantial number of 43 statements demand that Japan opens up its domestic market to U.S. car imports by removing the fast range of hard to specify NTBs, such as regulatory, taxation and structural barriers which almost completely exclude U.S. cars. An equally significant number of 40 statements oppose any TPP including Japan, insisting that only later, after it has built a multi-year track record of market opening, can Japan it be admitted to the agreement. A 2013 petition letter, still distributed by the Chrysler Group to its employees to be sent to Members of Congress, states the case of the Detroit Three against TPP concisely. It reads:

"Given Japan's closed market and its unwillingness to reform, a trade agreement will only lock in one-way trade in Japan's favor. ... We strongly oppose completing the Trans-Pacific Partnership (TPP) with Japan at this time because:

- Japan has the most closed automotive market in the world; and

– Japan continues to manipulate its currency to unfairly subsidize Japanese automakers."<sup>27</sup>

The AAPC stance matches that of the other main industry association of the U.S. automotive sector, the car components makers association MEMA, although they put more emphasis on Japanese NTBs than on Japanese currency manipulation. Similar to the AAPC, MEMA makes support of the TPP conditional on the removal of these NTBs.<sup>28</sup>

<sup>27.</sup> Chrysler Group, Petition Letter to Congress, November 2014. Available from < https://casemgt-cg.extra.chrysler.com/ExternalAffairs/> . Accessed 10 November 2014.

<sup>28.</sup> MEMA mentions other broader, not directly Japan related TPP concerns, especially the protection if Intellectual Property Rights (IPRs) and shows stronger overall support for the TP, demanding a renewal of Trade Promotion Authority (TPA).

The strong emphasis on Japanese currency manipulation and market opening stands out compared to other manufacturing sectors. Other main U.S. manufacturing sectors competing with Japan (machinery and equipment, electrical equipment and high-tech industries, and chemicals) display a rather different profile of policy demands when it comes to TPP. Firstly none of those industries displays in their postings the singular focus on Japan typical for the auto makers. Rather than linking support for TPP to an exclusion of Japan, these sectors do not give the Japan issue much prominence, but instead show broad support of the TPP. This is indicated by the often fielded demand for a renewal of TPA by the Congress to assure a smooth legislative passage of a future agreement. Furthermore, these sectors are, except for one statement by the Association for Manufacturing Technology (AMT), not concerned about currency manipulation. Market access to Japan matters to some degree for the machinery sector which insists that TPP has to remove remaining tariff and non-tariff trade barriers. The electrical and high technologies industries display similar demands, but go beyond by strongly supporting the "high-quality, 21st century" liberalization agenda of the TPP. They demand behind-the-border liberalization through measures such as regulatory harmonization and coherence, transparency and strong protection of intellectual property rights (IPRs). Their statements indicate that these industries are true stakeholders in the proposed trade agreement. They consequently voice support for a renewal of TPA. The chemical industry is even stronger in their support for the TPP and TPA renewal. However, their industry's associations put more emphasis on traditional market opening targeting Japan and less on the 21<sup>st</sup> century agenda, except for IPR protection. Again, currency manipulation is not an issue. Finally, the semiconductor and aerospace industry associations do not list any statements concerning the TPP. It seems these industries do not consider the agreement a major policy challenge. The extraordinary preoccupation, in terms of quantity and content, of the U.S. auto industry with Japan, and especially Japanese currency manipulation, compared to the other manufacturing industries competing with Japan, is puzzling. What distinguishes the competitive struggle between the Japanese and U.S. automotive sector from other sectors to explain this unique profile of the car industry's policy demands? Is the U.S. car industry specifically vulnerable to yen depreciation?

### The U.S. auto makers' vulnerability to Japanese currency manipulation: The limits of the OEP explanation.

OEP predicts the foreign economic policy preferences of domestic interest groups by deducting those preferences from international economic theory. In this section I will apply the OEP approach to see whether it can explain why it is almost exclusively the U.S. car makers who insist on a currency clause in the TPP. Drawing on International economic models, I will establish the industry-specific vulnerability to yen depreciation against the U.S. dollar along the lines of OEP analysis. Differences in vulnerability should provide solid explanations for policy differences in industry lobbying regarding Japanese currency policies. Are the U.S. auto makers are specifically vulnerable to an appreciation of the U.S. dollar vis-àvis the Japanese yen?

The base line of OEP analysis of exchange rate preferences by sectoral interest groups draws on standard international trade economics: currency appreciation against the currency of a major trade partner will harm a country's export-oriented and import competing manufacturers. Consequently, in the tradable-goods sector, industries can be expected to prefer government policies in international economic cooperation which result in a low and stable level of the exchange rate.<sup>29</sup> This expectation is confirmed by the OEP finding that policies depreciating the real exchange rate of trade partners, perceived as competitive devaluations by export- and import-competing industries, have on aggregate resulted in increasing protectionist policies in the affected country (Oatley 2010; Broz and Frieden 2001). Broz and Werfel (2014) apply the general findings generated by OEP analysis on the exchange rate-trade protectionism link to the analysis of specific U.S. industries. They find that exchange rate vulnerability and subsequent protectionist pressure varies by industry.<sup>30</sup> Investigating the response of U.S. industrial sectors to changes in the real effective exchange rate (REER) of the U.S. dollar, the authors establish that dollar appreciation resulted in an increased number of antidumping petitions by industries which are first of all characterized by high exchange rate pass-through. As they explain, the response of import competing industries to currency appreciation depends on their international position and market structure. The position and sensitivity to

<sup>29.</sup> See Frieden1991, 1994; and Broz and Frieden 2006; Oatley, 2012, Chapter 12.

<sup>30.</sup> Broz and Werfel 2014, 394.

exchange rate changes is moderated by three factors: exchange rate pass-through by foreign competitors to the price of manufacturing goods sold in the United States, import penetration of the American market relative to domestic consumption and the degree to which an industry depends on imported intermediate inputs.<sup>31</sup>

Following Broz' and Werfel's framework, I will establish the vulnerability of the six major manufacturing sectors competing with Japan to yen depreciation. It can be assumed that industries with the highest vulnerability will most strongly respond to Japanese yen-policies which weaken the yen with demands for currency disciplines in the TPP. If these assumptions are correct, the U.S. car sector should be especially vulnerable to dollar appreciation against the yen. To rate the degree of vulnerability of the six industries to yen depreciation, I will assess the three key variables given by Broz and Werfel: the degree of exchange rate pass-through of a depreciation of the yen vis-à-vis the dollar to lower prices in the U.S. market by Japanese importers; the U.S. market share, i.e. import penetration, of Japanese industries import-competing with U.S. firms; and the degree to which the industrial sectors make use of intermediate inputs from Japan.

Exchange rate pass-through of yen depreciation by Japanese importers to the U.S. can be incomplete. Depending on product type, corporate strategy, and market structure, firms may be more concerned about profits than market share and abstain from lowering prices in the United States in line with yen depreciation.<sup>32</sup> Low pass-through rates are also referred to as 'pricing-to-market' (PTM), a practice which has been found to be common for specialized manufacturing trade.<sup>33</sup> From an U.S. import-competing industry point of view, sectors distinguished by high pass-through should be most concerned about possible currency manipulation by Japan, since depreciation of the yen would translate immediately into a threat to domestic market share by Japanese importers. Sectors with low pass-through rates should be less concerned, since yen depreciation without matching price reductions in the U.S. will not result in a direct threat to market share, although the Japanese competitors gain an indirect

<sup>31.</sup> Broz and Werfel 2014, 397. The following is based on Broz' and Werfel's elaboration of these three factors.

<sup>32.</sup> See Krugman and Obstfeld 2009, 449.

<sup>33.</sup> See Ibid., 395.

advantage in terms of increased revenues from exports to the United States.

The import penetration rate is the percentage of domestic consumption covered by imports. A high import penetration rate indicates competitiveness problems of the import-competing domestic industry. U.S. industries which face high import penetration rates by their Japanese competitors can be expected to be more likely to ask for protection than more competitive export-oriented sectors (Rodrick 1995). When it comes to exchange rate policies, those industries should be highly alert about Japanese yen depreciation resulting in improved competitiveness of their Japanese counterparts.<sup>34</sup> However, the exposure to import-competition is mitigated by the degree to which sector-specific imports from Japan constitute intermediate inputs for the industries operating in that sector. For example, although the U.S. aerospace sector displays a high degree of Japanese import-penetration, most Japanese aerospace imports to the U.S. constitute intermediate inputs to the final product of companies such as Boeing. This implies that U.S. industries which rely strongly on imported intermediate imports from Japan will, in this aspect, profit from yen depreciation. These gains will partly offset the negative effects on U.S. competitiveness resulting from Japanese policies to weaken the yen.<sup>35</sup> Consequently it can be expected that industries making use of large quantities of Japanese produced inputs, relative to output, will be less concerned about Japanese exchange rate policies lowering the value of the yen. The key indicators which have to be taken into account to assess the degree of the vulnerability of U.S. manufacturing sectors to Japanese exchange rate policy are given in Table 2.

<sup>34.</sup> See Campa and Goldberg 1997.

<sup>35.</sup> See Ibid.

(1) (2) (3) (4) (5) (6)								
	X to Japan as % Gross Output	Country ranking of Japan as export destination	M from Japan as % of Domestic Consumption (Import Penetration)	Country ranking of Japan as country of origin of imports	Trade Balance with Japan as % of Gross Output	Intermediate Inputs as % of Gross Output		
Machinery	1.0%	9	6.8%	1	-5.7%	63.0%		
Computer, Electronics	2.4%	4	3.7%	3	-2.6%	33.7%		
Electrical equipment	1.3%	5	3.7%	3	-3.5%	56.8%		
Motor vehicles, Parts	0.3%	11	7.9%	2	-9.7%	77.0%		
Aerospace	5.2%	3	4.8%	3	2.3%	59.2%*		
Chemicals	1.4%	5	1.5%	5	-0.1%	53.4%		

Table 2: U.S. Export-and Import Competing Industries with Japan: Key Indicators (2012)

Sources: Foreign Trade Division, U.S. Census Bureau; Bureau of Economic Analysis, (BEA), U.S. Department of Commerce; Bureau of Economic Analysis, (BEA), U.S. Department of Commerce, Gross-Domestic-Product-(GDP)-by-Industry Data

\*calculated for 'other transportation equipment' (other than motor vehicles and parts).

Based on Table 2, I graded the six major U.S. manufacturing industries trading with Japan for their sensitivity to yen depreciation by allocating values for each of the moderating variables (pass-through, import penetration, intermediate inputs) on a scale of 1 to 3.<sup>36</sup> The results of my assessment are presented in Table 3.

<sup>36.</sup> Vulnerability to exchange rate pass-through and import penetration is graded on the following scale: 1 = neutral; 2 = vulnerable; and 3 = very vulnerable. The scale is reversed for the offsetting use of intermediate imports, with 1 = low vulnerability because of high use of intermediate imports, 2 = medium vulnerability; and 3 = high vulnerability because of low use of intermediate imports.

Table 5. Valuer ability of 0.5. maastres to suparese ten Deprectation							
		Machinery	Computer, Electronics		Motor vehicles, Parts	Aerospace	Chemicals
(1)	Sensitivity to exchange rate pass-through/ PTM	1	1	1	1	1	2
(2)	Levels of import penetration from Japan	3	2	2	3	3	1
Inte	ermediate Inpu	ıts*					
(A)	Intermediate inputs (total)*	1	3	2	1	1	2
(B)	Import penetration	1	2	2	1	1	3
(C)	Ranking of Japan as Importer*	1	2	2	1	2	3
(3)	Intermediate inputs from Japan. Average of (A)(B)(C).*	1	2.3	2	1	1.3	2.7

Table 3: Vulnerability of U.S. Industries to Japanese Yen Depreciation

\*Low values indicate high use of imported intermediate inputs because it reduces exchange rate vulnerability!

#### Exchange Rate Pass-Through

Exchange rate pass-through is the most significant variable to predict whether U.S. industries will pressure the American administration to address Japanese currency policy in the TPP negotiations. As Broz and Werfel (2014) point out, "exchange rates appear to provoke protectionist lobbying only where high pass-through implies a strong negative impact on industry competitiveness" (p. 414). In general, pass-through tends to be highest for competitive industries producing homogenous goods for sale to price-sensitive consumers, such as iron ore or petroleum products. It tends to be lowest in imperfect competitive industries where firms producing differentiated goods compete on quality or brand recognition, such as optical or medical equipment.<sup>37</sup> In addition, industries

<sup>37.</sup> See Goldberg and Knetter 1997.

characterized by oligopolistic competition, such as the Japanese car industry, display low rates of exchange rate pass-through.<sup>38</sup> To predict pass-through rates for specific industries, Rauch (1999) provided a classification of products by SITC code by three distinct categories: first, "homogenous products" (high pass-through); second, "reference-priced products" which are somehow unique but basically substitutable (medium pass-through); and third, "differentiated product" of great variety produced for specific consumer need, with producers competing on quality rather than price (low pass-through). Five of the six product groups investigated here (machinery and equipment, computer and electronics, electrical equipment, passenger cars and car parts, aircraft) were classified by Rauch predominantly as differentiated products (third group).<sup>39</sup> Only the chemical sector offer a different picture: the majority of chemical products, such as acids and polyamides, are classified as reference-priced products (second group). A minority, mainly medical and pharmaceutical products, fall into the group of differentiated products. The U.S. auto industry, according to these classifications, does not stand out as specifically vulnerable to yen depreciation. On the contrary, similar to other engineering manufacturing industries competing with Japan, it competes on differentiated products. In addition, being distinguished by monopolistic competition, all indicators point at very low exchange rate pass-through in the car sector, which should alleviate concerns about Japanese currency manipulations. Instead industry pressure against Japanese monetary policies should originate from the chemical sector, the only key industry which produces to a significant extend standardized products.

The picture is confirmed by the actual pricing behavior of key Japanese exporters to the United States since the rapid yen depreciation against the dollar associated with Abenomics. Shimizu and Kiyotaka (2014), asking why the Japanese trade balance has not shown any improvement since the beginning of the recent yen depreciation, have investigated the pricing behavior of the three main Japanese manufacturing exporters, general machinery, electric machinery and transport equipment, in terms of foreign invoice (contract) currency.<sup>40</sup> About 80 percent of Japanese exports are invoiced in foreign currency and almost 90

<sup>38.</sup> See Krugman and Obstfeld 2009.

<sup>39.</sup> The United Nations Standard International Trade Classification (SITC) of goods used by Rauch differs from the United States NIACS classification code. However, the broad categories of SITC correspond to the NAICS groups used in this study.

<sup>40.</sup> The authors use the industry classifications of the Bank of Japan.

percent of exports to the U.S. are invoiced in U.S. dollar.<sup>41</sup> Consequently their findings give a clear indication as to whether Japanese machinery, electrical machinery and auto makers passed through recent yen depreciation to lower U.S. dollar prices in the American market, or whether they went for pricing to market. The authors find that the export price indices in contract currency for general machinery and transportation equipment remained broadly stable despite the declining value of the yen vis-à-vis the dollar. Only the index for electrical machinery declined, but this was caused not be the pass-through of yen depreciation, but by the global decline in electronics prices.<sup>42</sup> They conclude that, following the sharp depreciation of the yen, Japanese exporters, including the automotive sector, chose PTM behavior.<sup>43</sup>

Consequently, in Table 3, in the row indicating exchange rate vulnerability due to exchange rate pass-through, I give a value of 1 to the automotive industry, together with machinery, computers and electronics, electrical equipment, and aerospace (differentiated products – very low exchange rate pass-through, PTM likely), and 2 to chemicals (reference priced products – intermediate passthrough).

#### Import Penetration

Drawing on Broz and Werfel (2014), it can be expected that yen depreciation will induce more pressure from industries with high import penetration rates from Japan for action against Japanese monetary policies resulting in yen depreciation. High import penetration, if not associated with high rates of intermediate inputs from abroad, signal competitiveness problems of an industry in its home market, making that industry particularly vulnerable (Campa and Goldberg 1997). In Table 3 import penetration from Japan of the manufacturing industries competing with Japan is ranked in row 2 on a scale of 1 (low) to 3 (high).<sup>44</sup> The ranking indicates high vulnerability to yen depreciation for the car industry, together with machinery and the aerospace sector, as far as exposure to

<sup>41.</sup> See Shimizu and Kiyotaka 2014, figure 17.

<sup>42.</sup> See Shimizu and Kiyotaka 2014, figure 11.

<sup>43.</sup> These findings are line with earlier studies. For example, Turkcan and Ates (2009) find a very low pass-through rate for Japanese auto imports to the U.S. market. However they investigate the period 1998 and 2006, broadly a period of yen appreciation vi-a-vis the dollar.

<sup>44.</sup> The scale, based on the percentage values for import penetration from Japan given in Table 2, Column 3, was defined as: 0% -1.5%: (1); 1.6%-4.7%:(2); 4.8%-7.9%: (3).

import penetration from Japan is concerned. The electronics and the electrical equipment industries are less exposed, and the chemical sector seems least vulnerable.

#### Intermediate Inputs

U.S.-Japan trade in manufacturing displays pattern of intra-industry trade typical for advanced economies (Schott 2014). Imports from Japan consist not just of final goods, but to a large extend of parts which enter as inputs into U.S. produced output. Following Broz and Werfel (2014), imports from Japan as result of outsourcing and the vertical organization of multinational production should mitigate concerns by U.S. industries about the effect of yen depreciation on their competitiveness.<sup>45</sup> High rates of intermediate inputs from the depreciating country (Japan) will transfer the benefits of exchange rate pass-through from the importers of intermediate goods downstream to the producers of final goods. This will lower input costs and thus offset the vulnerability of final goods producers to high rates of import penetration.<sup>46</sup> The industry-specific degree of use of intermediate inputs from Japan is determined by a subset of three variables: the percentage of intermediate inputs in final output, the degree to which intermediate inputs are filled by imports, and finally the degree to which these imports originate from Japan. I will assign a value on the scale of 1 to 3 to each of the three variables. In contrast to the scale for exchange rate pass-through and import penetration, value 1 will indicate *high* use of intermediate inputs because it reduces exchange rate vulnerability, 2 will indicate medium use of intermediate inputs and 3 low use, because it heightens the vulnerability to yen depreciation (see Table 3, Rows A, B, C).<sup>47</sup> Finally I will take the average of the three values as an indicator of the extent to which U.S. industries are vulnerable to yen depreciation, because of a low use of intermediate inputs from Japan (Table 3, Row 3).

Table 3, Row 3 indicates that of the key U.S. industries trading with Japan, machinery, the automotive industry and aerospace score low vulnerability values

<sup>45.</sup> See also Milner 1988; Hummels, Ishii, and Yi 2001.

<sup>46.</sup> See Koopman et al. 2013.

<sup>47.</sup> Row A is based on the indicators given in Table 2, Column 6. The scale is defined as: 0%-34%: (3); 35%-57%: (2); 58%-80%: (1). Row B inverses the scores of given in the same table for import penetration (Table 3, Row 2). Row C is based on the rankings of Table 2, Column 4. The scale is defined as: Japan as importer ranking 5 or 6: (3); ranking 4 or 3: (2); ranking 2 or 1: (1).

because of their high degree of use of intermediate inputs from Japan, compared to computers and electronics, electrical equipment and chemicals. For the car sector disaggregate data confirm this that intermediate inputs are indeed filled to a large extent by imports from Japan. In 2012, Japan accounted for 22.9 percent of U.S. car imports, and for 15.6 percent of car part imports.<sup>48</sup> After Mexico, Japan ranked second as country of origin for not only for automobile imports, but also for the import of car parts. This pattern justifies the low vulnerability score for the car industry given in Row 3.

Overall, the results of Table 3 are inconclusive. The car sector is not specifically vulnerable to high exchange rate pass-through. As in other industries, Japanese importers in this sector tend to price to market. It is the chemicals sector which is most exposed to pass-through. The U.S. auto industry is highly exposed to Japanese import penetration of its domestic market. But so are machinery and aerospace. In addition, the automotive industry makes high use of intermediate inputs originating from Japan, offsetting the detrimental effects of yen depreciation, which gives it a very low vulnerability score. Computers/ electronics and chemicals are much more exposed on this variable. The vulnerability indicators derived from economic variables based in international trade theory, identified by OEP analysis as relevant, cannot explain what caused the AAPC, and only the AAPC, to go all out in a unique lobbying campaign demanding the inclusion of currency disciplines in the TPP. In the final assessment, the OEP analysis is insufficient to explain why it is particularly the U.S. auto makers which demand currency provisions in the TPP. Assuming that the international policy demands of U.S. industry are the expressions of rational utility maximizing economic actors, the basic approach of OEP is correct. What then explains its limitations when it comes to the specific case investigated in this paper?

# A special case of U.S.-Japanese competition: GVCs and Japanese FDI in the automotive sector

OEP analysis of industry responses to exchange rate volatility is rooted in neo-classical trade theory, looking at the trading sector in terms of export-oriented and import competing firms. To understand the importance of profitability for the

<sup>48.</sup> Source: Foreign Trade Division, U.S. Census Bureau; Bureau of Economic Analysis, (BEA). Bureau of Economic Analysis, (BEA), U.S. Dep

competitive struggle of the Detroit Three with the big Japanese auto makers requires going beyond an international trade-focused to a global investmentfocused perspective. It requires looking at the car makers not primarily as domestic actors, as implied by the OEP approach, but as global MNEs, international investors operating vertically integrated global production networks, or global value chains (GVCs).<sup>49</sup> From this perspective, competition for global market share through foreign direct investment (FDI) in the age of capital mobility is the determining corporate strategy, rather than competition for national market shares through exports and import penetration. The new competition is more about exploiting absolute location-specific advantages on a global scale by reinvesting profits in the construction of global production networks or Global Value Chains (GVCs) linked by intra-firm trade, rather than about exploiting efficiency gains from specialization on national comparative advantage through international trade.<sup>50</sup> As OECD et al. (2014, 14) point out, the structural shift of technology and capital intensive MNEs to organize production globally in GVCs has created a new reality for trade. "The expansion of the operations of multinational enterprises (MNEs) as a business strategy (model) through foreign direct investment (FDI) has been a major driver of growth of GVCs.<sup>51</sup> A key feature of the fragmentation of production in GVCs is increasing intra-industry and intra-firm trade in intermediate goods. "The presence of foreign affiliates is clearly an important factor influencing both imported contents ... and participation in international production networks." Accordingly, over 70 percent of global trade is now in intermediate goods and services and capital goods, reflecting the growing specialization in specific activities and stages in value chains.<sup>52</sup> The structural shift in corporate strategy by MNEs to expanding their GVCs enhances the importance of high capital endowments relative to their competitors. As OECD et al. points out, FDI has been a major driver of the growth of GVCs, with a close correlation between rising FDI stocks and GVC

<sup>49.</sup> The term refers to the increasing geographical fragmentation and organizational vertical and horizontal integration of production on a global scale through outward investment and intra-industry trade in intermediate goods (IDE-JETRO and WTO 2011).

<sup>50.</sup> Trade and investment flows as integral to GVCs pose a new challenge to the explanatory power of traditional neo-classical textbook economics. For a discussion of these limitations, see Winkler and Milberg, 2011.

<sup>51.</sup> The OECD et al. establish a strong statistical correlation between FDI stock and participation in GVCs for developed countries (2014, Figure 3).

<sup>52.</sup> The interconnectedness between intra-firm and intra-industry trade and foreign investment has been explored in detail by Alfaro and Charlton (2009).

participation.<sup>53</sup> Penetrating foreign markets through growing GVCs requires that MNEs prioritize profitability in order to push outward investment to new levels.

The challenges of posed by the new international oligopolistic competition via investing in GVCs are particular severe for the U.S. car makers. Over the last decades their Japanese counterparts have expanded their North-American market share by prioritizing FDI over exports from Japan, setting up overseas assembly plants integrated in their international supply chains. High profit margins are central to this strategy. By choosing to respond to yen depreciation with a PTM policy Japanese auto MNEs boosted profitability, advancing their competitive edge in the race of international investment vis-à-vis their U.S. competitors.

Rather than the possibility of exchange rate pass-through, that is lower sale prices of Japanese cars in the U.S. market, it is PTM, the Japanese deciding not to undercut the prices of their U.S. counterparts, which concerns U.S. car makers. The comment by Ford's executive Joe Hinrichs reveals that it is not lower Japanese pricing in the U.S., but rising Japanese profit margins which is at the heart of the concerns of U.S. car firms: After stating that weakening of the yen puts roughly \$2,000 per export vehicle in the pockets of Japan's three largest automakers – Toyota, Nissan, and Honda, he continues: "When Toyota came out and said half their profits are due to currency change of the yen, that's a big deal." <sup>54</sup> Matt Blunt, president of the AAPC, in an interview on the TPP, makes the same arguments on the detrimental effects of currency manipulation: "That gives foreign automakers like Japan a real competitive advantage and it affects U.S. sales. Japan is generating a windfall profit of billions of dollars on an annual basis that they can reinvest into their industry."<sup>55</sup> The rising profits from yen depreciation by Japanese car makers are impressive indeed: Toyota, for example, reported 2013 annual earnings of about as much as the combined profits at the next two biggest automakers, Volkswagen and General Motors.<sup>56</sup>

<sup>53.</sup> OECD et al. 2014, 7.

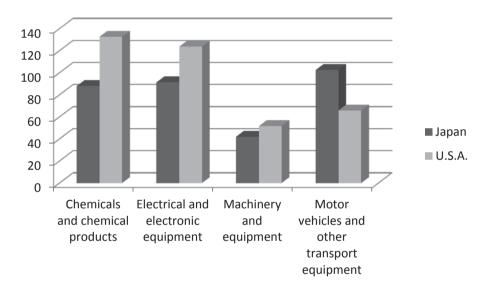
<sup>54.</sup> Quoted in *MLive*, 7 February 2014, Ford exec: Currency manipulation 'real elephant in the room. Available from <a href="http://www.mlive.com">http://www.mlive.com</a>. Accessed 5 November 2014.

<sup>55.</sup> Quotes in *The Vindicator: Vindy.com, the valleys homepage*, 7 September 2013, Auto industry gets tough on Japan in trade agreement talks. Available from <a href="http://www.vindy.com">http://www.vindy.com</a>. Accessed 19 November 2014.

<sup>56.</sup> *Bloomberg Businessweek*, 5 February 2014, Toyota Jumps Most Since June on Forecast for Record Profit. Available from < http://www.businessweek.com/news>. Accessed 25 October 2014.

The challenge posed to U.S. auto makers by Japanese FDI is uniquely severe, compared to other sectors. Whereas the other industries competing with Japan are leading their Japanese competitors when it comes to their global investment position, the U.S. car makers lag behind (see Figure 2). Windfall profits from Japanese exchange rate policies add to the Japanese capacity to expand investment globally, posing the risk that the Detroit Three will fall further behind in the investment race. Identifying this challenge goes a long way to explain the preoccupation of the AAPC with Japan's monetary policy of Abenomics.

## Figure 2: FDI outward stock, Japan and United States, by industry, 2012 (US\$ billion)



Source: ITC, FDI Statistics. Available from <a href="http://www.intracen.org/itc/market-info-tools/statistics-outward-country-industry">http://www.intracen.org/itc/market-info-tools/statistics-outward-country-industry</a>. Accessed 12 November 2014.

The link between yen depreciation and windfall profits of Japanese auto makers has a specifically troubling regional dimension for their U.S. counterparts. The competitive challenge the U.S. automotive industry faces from Japanese FDI in North America is substantial and unique to this industry. For 2012, a breakdown of unit sales for the main Japanese car firms shows that 70 percent of cars sold by Toyota, 94 percent of Honda cars, and 73 percent of Nissan cars were

made within the U.S (Figure 3).<sup>57</sup> Furthermore, these Japanese plants are the destination of most of the car parts imported to the United States from Japan. Japanese owned U.S. assembly plants, which are integral part of Japanese car production organized in GVCs, rely heavily on imported components, mainly supplied by Japanese car part makers closely integrated with the big Japanese automotive firms (Turkcan and Ates, 2009). Studies of the structure of the U.S. automotive sector by Klier and Rubenstein (2006, 2007) find that the domestic content of Asian assembly plants in the United States and Canada is only between 60 to 70 percent.

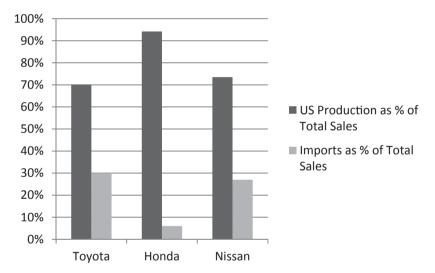


Figure 3: US Sales of Japanese Auto Makers by Origin of Production (2012)\*

Source: The Wall Street Journal, Market Data Center, Auto Sales. \*Units of passenger cars and lights trucks.

Boosted by windfall profits, Japanese car firms are pushing FDI within the North American region to a new level. The scale of the challenge is illustrated by a recent analysis in the Wall Street Journal. It reports that Japanese auto makers, enjoying a tailwind from the yen's recent decline against the dollar, are launching

<sup>57.</sup> Source: The Wall Street Journal, Market Data Center, Auto Sales. Available from <http://online.wsj.com/mdc/public/page/2\_3022-autosales.html#autosalesE>. Accessed 7 November 2014. In contrast, the U.S. automakers do not sell any locally assembled cars in Japan. For transportation equipment, in 2012 the FDI stock of U.S. firms in Japan was just 5% of Japanese stock in the U.S. (Schott 2014, Table 4).

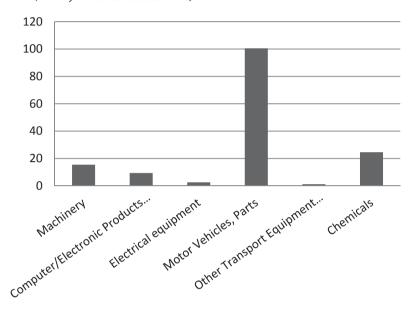
a major assembly plant expansion in North America, primarily targeting the U.S. market. Honda, which now exports more cars from the U.S. to Japan than vice versa, is going to open a new factory in Mexico. Toyota is spending 2 billion U.S. dollar to add about 145,000 vehicles a year to its assembly capacity and is expanding its North American engine- and transmission-making capability.<sup>58</sup>

The Japanese investment drive is fuelled not just by rising profits reaped from PTM of Japanese vehicles imported from Japan, but also by rising profit margins from the sale of cars assembled within the U.S.. Whereas Japanese car makers have opted to keep sale prices in the U.S. stable, both for imports and U.S. assembled cars, Japanese makers of car parts producing in Japan and supplying Japanese assembly plants in the U.S., chose the opposite pricing policy: they tend to pass through depreciation to lower U.S. dollar prices. This passes profit windfalls from yen depreciation downstream, via lower input costs for Japanese cars assembled in North America. As Turkcan and Ates (2009) suggest, "the increase in foreign transplant company shares in the US and their preference to obtain intermediate goods from their source country may explain relatively higher pass-through rates into auto-part import prices" (p. 9). <sup>59</sup> The close relationship between Japanese car firms operating assembly plants in the U.S. and Japanese importer of car parts makes the OEP argument that high shares of intermediate inputs from a competing trading partner will offset exchange rate movements obsolete for the case of the Detroit Three. It is Japanese firms, and not their U.S. competitors, which gain from the lower input costs resulting from yen depreciation because Japanese intermediate inputs enter predominantly into the supply chains of Japanese assembly plants. This situation is unique for the U.S. car sector; no other key manufacturing sector exposed to trade with Japan displays such high rates of Japanese FDI and the associated pattern of Japanese intermediate inputs destined for Japanese output within the United States (see Figure 4).

<sup>58.</sup> *The Wall Street Journal*, 28 January 2014, Honda's U.S. Factories Hit Export Milestone. Available at < http://online.wsj.com>. Accessed 5 November 2014.

<sup>59.</sup> Calculating the U.S. domestic content of all Japanese cars sold in the U.S. in 2006, that is imports plus U.S. assembly, Klier and Rubenstein (2007) give a ratio of only 40 percent domestic content, which explains the massive increase in profit margins reaped by the Japanese firms in phases of yen depreciation.

Figure 4: Total Assets of Major Japanese Industries in the U.S. (2011, in U.S. dollar bn)\*



\* Total Assets of Majority-Owned U.S. Affiliates of Japanese Industry. Source: Bureau of Economic Analysis (BEA), Foreign Direct Investment in the United States. Available from <a href="http://bea.gov/international/dilfdiop.htm">http://bea.gov/international/dilfdiop.htm</a>. Last modified: 15 October 2014.

To sum up, the demands by the Detroit Three for currency disciplines in the TPP have to be interpreted in the light of the detrimental consequences Japanese PTM has for U.S. automakers in their struggle to keep up with Japanese investment, globally and in the North American region. The fact that, contrary to assumptions informing the OPP approach, PTM by Japanese competitors is not a blessing for U.S. car makers, but a curse, explains why the Detroit Three put Japanese currency policies which weaken the yen at the top of their TPP lobbying agenda. This link is only revealed by looking at the Japanese competitive challenge not as originating from cross-border trade, but from Japanese FDI to expand the production networks unique for Japanese auto makers.

The link between yen depreciation, PTM, Japanese profitability and increased FDI in GVCs resolves the puzzle of why it is predominantly the auto makers who table demands for a currency clause in their lobbying on the TPP. None of the other main industries is faced with global competition from FDI by their Japanese rivals to the extent of the auto makers. Nor do the other industries display a

penetration of their home base by Japanese FDI on the scale of the U.S. auto industry. Finally, the close relationship between Japanese car part importers and Japanese assembly plants invalidates the mitigating argument that U.S. car producers should gain from high levels of imports of intermediate inputs from Japan, further adding to the exposure of the Detroit Three to yen depreciation. Again, this is a situation unique to the automotive sector. Because international trade and investment are increasingly interconnected in GVCs, Japanese policies aiming at depreciating the yen are now perceived by U.S. auto makers primarily as a threat to their global and regional investment position relative to their Japanese counterparts.

As OECD et al. (2014) suggest, the emergence of complex goods and production processes in the form of GVCs have affected how firms make strategic policy decisions, requiring politicians to take a more holistic approach to trade and investment policies. As the TPP's high-quality, 21<sup>st</sup> century liberalization agenda demonstrates, distortions to international trade has now to be addressed in conjunction with distortions to international investment. This inevitably brings in the problem of the windfall profits for MNEs resulting from competitive devaluation policies by their home country. Although its seems unlikely that the Detroit Three will succeed with bringing in currency disciplines to the TPP, trade policy makers will likely face growing pressures for an inclusion of currency disciplines into state-of-the-art trade agreements.

### Conclusion

The OEP analysis suffered from taking insufficient account of the links between trade and FDI in the age of globalization. As a result it overlooked that the unique policy preferences of U.S. based automotive MNEs are primarily rooted in concerns about their relative investment position vis-à-vis their Japanese competitors. As the case of Japanese exchange rate policies and the U.S. car industry demonstrates, the dividing line in terms of who wins and who loses from these policies is not between export-oriented Japanese firms as winners and import-competing U.S firms as losers, but between Japanese MNEs as winners over U.S. firms in the race for expanding global investment. The FDI factor explains why it is high rates of Japanese PTM, the flip-side of low exchange rate pass-through, which makes the U.S. industry vulnerable to yen depreciation. In a world in which not just goods, but capital is mobile across borders, manufacturing

MNEs compete for global market share by expanding vertically integrated production networks through a strategic focus on raising FDI. Currency policies which weaken the yen allow Japanese automotive MNEs to reap massive profit windfalls which are reinvested globally. This gives them an edge as global investors over their U.S. competitors. An OEP analysis which relies excessively on standard trade theory and defines vulnerability to currency manipulation mainly in terms of high exchange rate pass-through and see high rates of intermediate imports from the depreciating country as a mitigating factor, fails to take account of the complexity of GVCs.

Why does OEP analysis draw on conventional neo-classical economic theories which themselves struggle to incorporate the new quality of international economics in the age of global production? Oatley (2011), in his critique of the OEP approach in IPE, points out that, in its pursuit of scientific rigor, OEP takes the risk of "methodological reductionism". Firstly, the approach tends to neglect causally significant complex global processes which cannot be analyzed clearly along domestic-international lines. In Oatley's words, "as national economies have grown evermore deeply enmeshed in cross-border networks of investment, production, and trade, American international political economy (IPE) scholars have focused evermore heavily on domestic politics" (p. 311). Secondly, OEP tends to omit global complexity which does not fit into neat models of causal relationships deduced from clear-cut international trade and exchange rate economics. Its positivist approach, which starts from law-like generalizations drawn from textbook economics amenable to empirical testing, fails to engage in problem-driven research (p.335). The failure to infer the causes of the U.S. car industry's' pressure for currency disciplines in the TPP from an OEP framework of analysis demonstrates the two risks of the "reductionist gamble". The seemingly paradoxical alarm of the Detroit Three about Japanese profitability as result of Japanese PTM is only explained by taking account of the global complexities of automotive trade interlinked with FDI in GVCs, complexities which distinguish the car sector from other U.S. industries. Taking less rigorous, but more problemdriven and inductive approach than suggested by OEP helped to reveal these complexities. Starting from the specific concerns of the U.S. auto makers helped to overcome the limitations of OEP's reductionist gamble.

#### **References:**

- Alfaro, Laura, and Andrew Charlton. 2009. Intra-Industry Foreign Direct Investment. American Economic Review, 99 (5): 2096–2119.
- Bergsten, C. Fred, and Joseph Gagnon. 2012. Currency Manipulation, the US Economy, and the Global Economic Order. Policy Brief in International Economics 12-25. Washington: Peterson Institute for International Economics.
- Bergsten, C. Fred. 2014a. Currency Wars and the International Economic Order. Lecture delivered at the Stockholm School of Economics, Stockholm, Sweden, August 22, Stockholm, Sweden.
- Bergsten, C. Fred. 2014b. Addressing Currency Manipulation Through Trade Agreements, Policy Brief in International Economics 14-2. Washington: Peterson Institute for International Economics.
- Broz, J. Lawrence, and Jeffry Frieden. 2006. The Political Economy of Exchange Rates. In *The Oxford Handbook of Political Economy*, edited by Barry R. Weingast and Donald Wittman, 587–600. New York: Oxford University Press.
- Broz, J. Lawrence, and Seth H. Werfel. 2014. Exchange Rates and Industry Demands for Trade Protection. *International Organization*, 68 (2): 393-416.
- Campa, Jose, and Linda S. Goldberg. 1997. The Evolving External Orientation of Manufacturing: A Profile of Four Countries. Federal Reserve Bank of New York Economic Policy Review 3 (2):53–82.
- Cline, William R., and John Williamson. 2012. Updated Estimates of Fundamental Equilibrium Exchange Rates. Policy Brief in International Economics 12-23. Washington: Peterson Institute for International Economics.
- Devereaux, C., Lawrence, R. Z., & Watkins, M. 2006. *Case studies in US trade negotiation: Vol. 1*. Washington, DC: Institute for International Economics.
- Eichengreen, Barry J., and Douglas A Irwin. 2009. "The Slide to Protectionism in the Great Depression: Who Succumbed and Why?" NBER Working Paper No. w15142. Cambridge, Mass.: National Bureau of Economic Research.
- Frieden, Jeffry. A. 1991. Invested interests: the politics of national economic policies in a world of global finance. *International Organization*, 45 (4): 425-451.
- Gagnon, Joseph E. 2013. The Elephant Hiding in the Room: Currency Intervention and Trade Imbalances. Working Paper 13-02. Washington: Peterson Institute for International Economics.
- Goldberg, Pinelopi Koujianou, and Michael M. Knetter. 1997. Goods Prices and Exchange Rates: What Have We Learned? *Journal of Economic Literature* 35 (3):1243–72.
- Hummels, David, Jun Ishii, and Kei-Mu Yi. 2001. The Nature and Growth of Vertical Specialization in World Trade. *Journal of International Economics* 54 (1):75–96.
- IDE-JETRO and WTO. 2011. Trade patterns and global value chains in East Asia: From trade in goods to trade in tasks. Geneva, Switzerland: World Trade Organization.
- IMF. 2014. Statistics Department. International Reserves and Foreign Currency Liquidity: Japan. [Washington, D.C.]: International Monetary Fund. Last Updated: October 7, 2014. Available from: <a href="http://www.imf.org/external/np/sta/ir/IRProcessWeb/data/jpn/eng/curjpn.htm#I">http://www.imf.org/external/np/sta/ir/IRProcessWeb/data/jpn/eng/curjpn.htm#I</a>
- Klier, Thomas H., and James M. Rubenstein. 2006. *Competition and Trade in US Auto-Parts Sector*. Chicago Fed Letter No 222, January. Chicago IL: Federal Reserve Bank of Chicago.
- Klier, Thomas H., and James M. Rubenstein. 2007. Whose part is it?—Measuring domestic content of vehicles. Chicago Fed Letter No 243, October. Chicago IL: Federal Reserve Bank of Chicago.

- Koopman, Robert B., Marinos Tsigas, David Riker, and William Powers. (2013). The implications of using value-added trade data for applied trade policy analysis. In *Global value chains in a changing world*, edited by D. K. Elms and P. Low. Geneva: World Trade Organization Publications.
- Krugman, Paul R., and Maurice Obstfeld. 2009. International Economics: Theory and Policy. Boston: Pearson Addison-Wesley.
- Lake, David A. 2006. International Political Economy: A Maturing Interdiscipline. In *The Oxford Handbook of Political Economy*, edited by Barry R. Weingast and Donald A. Wittman, 757–77. New York: Oxford University Press.
- Low, Patrick, and Deborah K. Elms. 2012. What is "high-quality, twenty-first century" anyway? In The Trans-Pacific Partnership: A Quest for a Twenty-First-Century Trade Agreement, edited by C. L. Lim, Deborah K. Elms, and Patrick Low, 3-17. Cambridge: Cambridge University Press.
- Milner, Helen V. 1988. Resisting Protectionism: Global Industries and the Politics of International Trade. Princeton, NJ: Princeton University Press.
- Oatley, Thomas. 2010. Real Exchange Rates and Trade Protectionism. *Business and Politics* 12 (2):1–17.
- Oatley, Thomas. 2011a. International Political Economy. 5th ed. New York: Pearson/Longman.
- Oatley, Thomas. 2011b. The Reductionist Gamble: Open Economy Politics in the Global Economy. *International Organization* 65 (2): 311-341.
- OECD, WTO, and World Bank Group . 2014. Global Value Chains: Challenges, Opportunities, and Implications. Report prepared for submission to the G20 Trade Ministers Meeting Sydney, Australia, 19 July. Available from <a href="http://www.oecd.org/tad/gvc\_report\_g20\_july\_2014.pdf">http://www.oecd.org/tad/gvc\_report\_g20\_ july\_2014.pdf</a>>.
- Office of International Affairs, U.S. Treasury. 2014. Report to Congress on International Economic and Exchange Rate Policies, October 15. Washington DC.
- Putnam, Robert D. 1988. Diplomacy and domestic politics: the logic of two-level games. International Organization, 42 (3): 427-460.
- Rauch, James E. 1999. Networks Versus Markets in International Trade. Journal of International Economics 48 (1):7-35.
- Rodrik, Dani. 1995. The Political Economy of Trade Policy. In *Handbook of International Economics*, Vol. 3, edited by Gene M. Grossman and Kenneth Rogoff, 1457–94. Amsterdam: Elsevier.
- Schott, Jeffrey J. 2014. The United States, Japan, and the Trans-Pacific Partnership. Paper presented at a conference held by the High-Level Working Group on Japan-US Common Economic Challenges, at the Peterson Institute, Washington, DC, June 2.
- Shimizu, Junko, and Sato Kiyotaka. 2014. Abenomics, Yen Depreciation, Trade Deficit and Export Competitiveness. RIETI Discussion Paper 14-J-022. April. Tokyo: Research Institute of Economy, Trade and Industry. (In Japanese. Citations refer to the English translation available at <a href="http://www.akes.or.kr/eng/papers(2014)/61.full.pdf">http://www.akes.or.kr/eng/papers(2014)/61.full.pdf</a>).
- Staiger, Robert W., and Alan O. Sykes. 2008. "Currency manipulation" and World Trade. NBER Working Paper No. w14600. Cambridge, Mass.: National Bureau of Economic Research.
- Turkcan, Kemal, and Aysegul Ates. 2009. An Examination of Exchange Rate Pass-Through to U.S. Motor Vehicle Products and Auto-Parts Import Prices. *Global Economy Journal* 9 (1): 1–16.
- Winkler, Deborah, and William Milberg. 2011. Classical and Neoclassical Theories of Offshore Outsourcing. Working Paper 13/2011, Department of Economics, New York: The New School for Social Research.