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CLUB GOODS AND REGULATORY OPPORTUNISM: TRANS-PACIFIC PARTNERSHIP AND RULES OF ORIGIN FOR AUTOS

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INTRODUCTION

The twelve Trans-Pacific Partnership (TPP)[1] parties vary widely in geographical location, level of economic development, political institutions, and interconnectedness. The parties to the TPP include the three North American Free Trade Agreement (NAFTA)[2] parties, the United States, Canada, and Mexico; three additional developed countries, Australia, Japan, and New Zealand; an advanced economy, Singapore; two rapidly-growing economies, Vietnam and Peru; a well-to-do economy dependent on gas and oil, Brunei Darussalam (Brunei); and middle income countries, Malaysia and Chile.[3] The United States, Canada, and Mexico have developed many integrated supply manufacturing chains as a result of NAFTA.[4] For Japan and the United States, TPP is the countries' first bilateral trade agreement of this depth and breadth.[5]

The twelve countries became signatories to TPP to take advantage of the benefits that a regional trade agreement offers.[6] In a way, being a party to TPP is similar to joining an exclusive club and receiving the benefits of "club goods."[7] The detriment of not being a TPP member is being discriminated against in not receiving the benefits of the club goods.[8] Non-members may be tempted to use opportunistic behavior to take advantage of the spillover benefit of the TPP regulatory system even though they were not the intended recipients of TPP. TPP members might assume that non-TPP parties will use regulatory opportunism to

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1. Trans-Pacific Partnership Agreement, UNCTAD/WEB/DITC/2016/3, http://unctad.org/en/PublicationsLibrary/webditc2016d3_en.pdf.

2. North American Free Trade Agreement, Dec. 17, 1992, art. 1708(14), H.R. Doc. 103-159, 32 I.L.M. 289, 673 (entered into force Jan. 1, 1994).

3. INT'L TRADE COMM'N, TRANS-PACIFIC PARTNERSHIP AGREEMENT: LIKELY IMPACT ON THE U.S. ECONOMY AND ON SPECIFIC INDUSTRY SECTORS 52-54, 56-59, 695-740 USITC Pub. 4607 (May 2016), https://www.usitc.gov/publications/332/pub4607.pdf [hereinafter INT'L TRADE COMM'N].

4. *Id.* at 56.

5. *Id.*

6. *See generally Regional Trade Agreements*, THE ORGANISATION FOR ECONOMIC CO-OPERATION & DEVELOPMENT (OECD), http://www.oecd.org/tad/benefitlib/regionaltradeagreements.htm (last visited Nov. 19, 2016).

7. *See* Trans-Pacific Partnership Agreement, art. 8.

8. *See infra* footnotes 244–57 and accompanying text.

benefit.[9] The hypothesis of this article is that TPP will have an overall positive effect on the auto and auto parts industry of the TPP parties and that TPP will have a slightly negative effect on China, a non-member.

Part I of this article reviews the economic, political, and institutional dimensions of a regional trade agreement. Part II describes the auto industry, paying special attention to the auto industry in the United States. Part III provides information on rules of origin in general and TPP rules of origin for autos in particular. Part IV analyzes the effect of TPP on the auto industry.

I. THE ECONOMIC, POLITICAL, AND INSTITUTIONAL DIMENSIONS OF A REGIONAL TRADE AGREEMENT

Fiat Chrysler Automobiles, Ford Motor Company, and General Motors, sometimes referred to as the Detroit Three, still have a strong presence in the United States.[10] They have been joined by other car makers who import vehicles into the United States and who manufacture foreign cars in the United States.[11] In addition, the Detroit Three manufacture vehicles outside the United States, either in their own plants or in partnership with foreign car makers, some of which are imported into the United States.[12] The global value chain is central to the automotive sector in that auto components and the parts that make up each component often originate from far-flung locations all over the world.[13]

A regional trade agreement has economic, political, and institutional dimensions. TPP is an exercise in balancing domestic needs, which might demand protectionist provisions, in the face of an increasingly global economy whose foundation is trade liberalism.[14] The United States representatives to TPP negotiations kept interest groups in the United States in mind because of the potential opposition interest groups could cause in Congress if they did not see benefits for them under TPP.[15] This part considers each of the three dimensions in turn.

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9. *See infra* footnotes 258–66 and accompanying text.

10. *See generally* Thomas H. Klier, *From Tail Fins to Hybrids: How Detroit Lost Its Dominance*, 33 ECON. PERSP. 2 (2Q/2009), https://www.chicagofed.org/publications/economic-perspectives/2009/2qtr-klier.

11. *Id.* at 14.

12. Timothy J. Sturgeon & Johannes Van Biesebroeck, *Crisis and Protection in the Automotive Industry: A Global Value Chain Perspective* 8 (World Bank Pol'y Res. Working Paper No. 5060, 2009), http://documents.worldbank.org/curated/en/357861468315545086/pdf/WPS5060.pdf [hereinafter Sturgeon & Van Biesebroeck].

13. *Id.* at 3.

14. World Bank Group, *Trade Liberalization: Why So Much Controversy? In* ECONOMIC GROWTH IN THE 1990S: LEARNING FROM A DECADE OF REFORM 135-36, http://www1.worldbank.org/prem/lessons1990s/chaps/05-Ch05_kl.pdf

15. Eric Bradner, *How secretive is the Trans-Pacific Partnership?*, CNN (June 12, 2015), http://www.cnn.com/2015/06/11/politics/trade-deal-secrecy-tpp/.

A. The economic dimension

The economic dimension of an international trade agreement ranks just above the political dimension in criticality.[16] Valuing the effects of TPP is extremely difficult, even for economists. Much depends on how TPP is interpreted and applied into the future. Economists and attorneys may spend many months working up a regulatory impact assessment of a trade agreement *ex ante*;[17] however, an *ex post* regulatory impact assessment may differ significantly.[18]

The auto industry is a multi-national enterprise that is extremely competitive.[19] As a significant stakeholder, the auto industry will be performing its own regulatory impact assessment of the strengths, weaknesses, opportunities, and threats.[20] The effect of the TPP on the auto industry has much to do with the rules of origin.

The United States has both strengths and weaknesses in the automotive industry; these strengths and weaknesses must be considered when evaluating the effects that TPP might have on those industries. The United States strengths lie in research and development, technology innovations, and a workforce with the advanced skills used in certain phases and sectors of manufacturing.[21] Portions of the auto industry that are high-skilled and high-paying depend on the integration of the United States auto industry into the global value chain.[22]

The United States vulnerability lies in lower-skill level manufacturing.[23] One of the sensitive sectors for the United States is the automotive sector because of the potential job loss in lower-skill level auto and auto component manufacturing.[24] The fear is that lower-skill level production of autos and auto components will move to other countries that have lower labor costs.[25] However, well-meaning but protectionist policies, if instituted by the United States, would likely result in retaliatory action from international trading partners and loss of foreign direct

16. SHIHOKO GOTO, THE TPP REMAINS KEY TO U.S. ENGAGEMENT IN THE ASIA-PACIFIC REGION (2015), *available at* https://www.wilsoncenter.org/article/the-tpp-remains-key-to-us-engagement-the-asia-pacific-region.

17. *See* DIEGO A. CERDEIRO, ESTIMATING THE EFFECTS OF THE TRANS-PACIFIC PARTNERSHIP (TPP) ON LATIN AMERICA AND THE CARIBBEAN (LAC) 4, 17–19 (2016), https://www.imf.org/external/pubs/ft/wp/2016/wp16101.pdf.

18. *Id.* at 19.

19. Wagner Cezar Lucato et al., *Measure the Degree of Competitiveness for Auto Parts Manufacturing Companies*, 50 INT'L J. PRODUCTION RES. 5508, 5519-20 (2012).

20. Keith Head, *How Will* the TPP Affect the Auto Industry?, WORLD ECO. FORUM (Nov. 15, 2015), https://www.weforum.org/agenda/2015/11/how-will-the-tpp-affect-the-auto-industry/.

21. Theodore H. Moran & Lindsay Oldenski, *How Offshoring and Global Supply Chains Enhance the US Economy*, PETERSON INST. FOR INT'L ECONOMICS 5 (2016).

22. *Id.*

23. *Id.*

24. *TPP Auto ROO Most Likely To Hurt Makers Of Less Complex Parts: Experts*, INSIDE U.S. TRADE (Jan. 21, 2016), https://insidetrade.com/inside-us-trade/tpp-auto-roo-most-likely-hurt-makers-less-complex-parts-experts (last visited Jan. 21, 2017).

25. *Id.*

investment in the United States.[26] As a result of the United States auto industry's integration into the global value chain, protectionist moves by the United States would be counter-productive by resulting in the loss of foreign investment and high-skilled and high-paying auto industry jobs in the United States.[27]

China, a TPP non-party, Japan, and the United States, as TPP parties, all have significant ties to the automotive industry.[28] A key question is what effect TPP will have on the automotive industry of the three countries. The table below shows the importance of total worldwide exports of cars and car parts for China, Japan, and the United States as far as the top thirty export industries for those countries.[29] For Japan and the United States, the car and car parts industries were among the top thirty exporting industries, while only the car parts industry was among the top thirty exporting industries for China.[30] When comparing exports to imports, one sees that the exports and imports of car parts for China was nearly equal;[31] for Japan, car exports were approximately nine times imports, and exports of car parts were approximately five times imports;[32] for the United States, car exports were a little more than one-third the amount of imports and car part exports were approximately four-fifth of imports.[33]

26. *Id.*

27. *Id.* at 1–2.

28. ROBERT E. SCOTT, THE CONSEQUENCES OF NEGLECTING MANUFACTURING; COMPARED WITH OTHER NATIONS, U.S. HAS MORE IMPORT COMPETITION IN LEADING EXPORT INDUSTRIES 8, 10, 14 (2015), http://www.epi.org/files/pdf/83495.pdf.

29. *Id.*

30. *Id.*

31. *Id.*

32. *Id.*

33. *Id.*

Trade in cars and motor vehicle parts ranked by value of exports, 2013 (billions of dollars)[34]

Country	Rank of export	HS code	Description	exports	imports	trade balance	Import ratio
China	8 of 30	8708	Parts and accessories for motor vehicles	$25.5	$24.2	$1.4	94.7%
Japan	1 of 30	8703	cars	$91.7	$10.6	$81.1	11.6%
Japan	3 of 30	8708	Parts and accessories for motor vehicles	$35.3	$7.1	$28.8	20.2%
United States	3 of 30	8703	cars	$57.1	$155.7	-$98.6	272.5%
United States	4 of 30	8708	Parts and accessories for motor vehicles	$42.9	$58.9	-$15.9	137.1%

The TPP *Rules of Origin* for autos recognize[35] that the automotive industry is critical for the economies of a number of the parties to the TPP as well as being critical for non-members. One indication of the criticality of the trade in cars and car parts is the convoluted nature of the extremely lengthy rules of origin for autos with all their bewildering cross-references that were heavily debated;[36] another indication of the critical nature of the auto industry to the economies of several TPP countries is that the TPP provisions concerning autos were reportedly some of

34. SCOTT, *supra* note 28, at 8–15.

35. *See* Trans-Pacific Partnership Agreement, art. 8.

36. *See* MARK WU, TRANS-PACIFIC PARTNERSHIP ROUNDTABLE ON AUTO MANUFACTURING SUPPLY CHAIN, PREPARED REMARKS BEFORE U.S. HOUSE OF REPRESENTATIVE – COMMITTEE ON WAYS AND MEANS, CONVENED BY DEMOCRATIC MEMBERS (January 11, 2016), *available at* http://democrats.waysandmeans.house.gov/sites/democrats.waysandmeans.house.gov/files/documents/Wu%20-%20TPP%20Roundtable%20on%20Autos%20-%20Jan%202016.pdf; U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON WAYS & MEANS MINORITY STAFF REPORT 114TH CONGRESS, TPP ISSUE ANALYSIS: TRADE IN THE AUTOMOTIVE MANUFACTURING SUPPLY CHAIN (Jan. 8, 2016), *available at* http://democrats.waysandmeans.house.gov/sites/democrats.waysandmeans.house.gov/files/documents/TPP%20Issue%20Analysis%20-%20Autos.pdf [hereinafter TPP ISSUE ANALYSIS: TRADE]; Reid Whitten, *The Trans Pacific Partnership and the Auto Industry: Will Six Thousand Pages Pave the Way for Increased Exports?*, GLOBAL TRADE LAW BLOG (Nov. 12, 2015), http://www.globaltradelawblog.com/2015/11/12/the-trans-pacific-partnership-and-the-auto-industry-will-six-thousand-pages-pave-the-way-for-increased-exports/.

the latest agreed upon in the negotiations.[37]

The reason to implement TPP is in part due to its projected economic benefits. Economists have long thought that integration of the markets of countries with differences in labor costs, productivity, capital, and natural resources will result in greater efficiency and growth;[38] global value chains account for eighty percent of international trade.[39] United States multi-national enterprises, such as automakers and auto part suppliers use global supply chains to reduce labor costs, increase productivity, and expand their shares of the global market.[40] TPP should produce aggregate economic gains because of the wide variances in labor, capital, and natural resources among the parties to TPP.[41] Another benefit of a regional trade agreement may be in reducing non-tariff barriers.[42] The reality is that the welfare of sensitive sectors of the United States economy, such as the auto industry, must be balanced against an economically-sound trade system favored by most economists.[43]

B. The Political Dimension

The political dimension is critical because it involves spending political capital. A trade agreement involves giving up some sovereignty and the question is to what extent. Each country must provide bargaining chips that can be used to entice a needed concession from another signatory. A trade agreement can lock-in domestic reforms; because it operates over the long term, it can provide stability over many changes in government administration.[44] A trade agreement can provide shelter to a new government administration against pressure to change a domestic reform made by a prior government administration; at the same time, a foreign direct investor expects predictability based on the trade agreement.[45]

After the United States becomes a signatory to a trade agreement, it must be ratified by Congress to make it become part of the country's domestic law.[46] The United States is typically a standard-setter because of its large market share and the recognition by other signatories that the trade agreement cannot become effective

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37. *TPP Rule of Origin is 45% for Vehicles, With Caveats; 35-45% for Auto Parts,* INSIDE U.S. TRADE (Oct. 7, 2015), http://www.bilaterals.org/?tpp-rule-of-origin-is-45-for [hereinafter TPP RULE OF ORIGIN IS 45%].

38. David H. Autor, et al., *The China Shock: Learning from Labor Market Adjustment to Large Changes in Trade* (Nat'l Bureau of Econ. Res., Working Paper No. 21906, 2016), http://www.ddorn.net/papers/Autor-Dorn-Hanson-ChinaShock.pdf.

39. Moran & Oldenski, *supra* note 21.

40. *Id.*

41. CERDEIRO, *supra* note 17, at 8–10.

42. *Id.* at 10.

43. *Id.* at 12.

44. John Whalley, *Why Do Countries Seek Regional Trade Agreements?*, in THE REGIONALIZATION OF THE WORLD ECONOMY 63, 71 (Jeffrey A. Frankel, ed. 1998), *available at* http://www.nber.org/chapters/c7820.pdf.

45. *Id.*

46. Meredith Kolsky Lewis, *The Trans-Pacific Partnership: New Paradigm or Wolf in Sheep's Clothing?*, 34 B.C. INT'L & COMP. L. REV. 27, 44 (2011).

without Congressional ratification.[47] A trade agreement is an opportunity with advantages and disadvantages, but not ratifying can have advantages and disadvantages as well. For ratification, the overall benefits of the trade agreement must outweigh the constraints that the trade agreement imposes.

Entering into a trade agreement can involve a political cost. Ratification of a trade agreement may involve a dominant industry championing the trade agreement; a dominant industry being convinced not to oppose the trade agreement; a government leader willing to place political capital at risk; or a combination. For United States elections, the candidate typically uses rhetoric that appeals to the ordinary citizen rather than to big business.[48] However, once elected, government officials must keep businesses in mind when implementing policy to keep the economy thriving; in other words, trade policy usually follows the money trail.[49] Each member of Congress constantly monitors the member's voter base to gauge whether the member's constituents are favorably or unfavorably inclined toward a trade agreement scheduled to come up for a vote in Congress.[50] Politicians are extremely susceptible to pressure from constituents and interest groups.[51]

A trade agreement like the TPP stirs up politics in the United States because of the domestic consequences it can have in restructuring the distribution chain in the various manufacturing sectors, not the least being the auto industry.[52] An interesting factor that plays into this is the openness of a country's economy. Generally, a country has a more closed economy if its exports significantly exceed its imports.[53] China is considered a closed economy, as is Japan, although not to the degree of China.[54] In contrast, the United States has an open economy, with its imports exceeding exports in its top thirty export industries, thus leading to a trade deficit.[55] The trade deficit of the United States becomes a matter for political discussion when the voter feels that domestic production is receiving "unfair" competition from foreign imports and the United States is not exporting more because of trade barriers erected by the same countries from which the United

47. *Id.* at 39.

48. *New Survey Shows Majority Of Clinton Supporters Favor TPP*, INSIDER TRADE (2016), http://insidetrade.com/trade/new-survey-shows-majority-clinton-supporters-favor-tpp. For example, at one campaign stop Hillary Clinton declared: "My message to every worker in Michigan and across America is this. I will stop any trade deal that kills jobs or holds down wages, including the Trans-Pacific Partnership." *Id.*

49. *The Benefits of International Trade*, THE U.S. CHAMBER OF COMMERCE, https://www.uschamber.com/international/international-policy/benefits-international-trade-0 (last visit Dec. 5, 2016).

50. *BRT: Anti-Trade Campaign Rhetoric Impacts Congressional Support For TPP*, INSIDER TRADE (2016), http://insidetrade.com/daily-news/brt-anti-trade-campaign-rhetoric-impacts-congressional-support-tpp.

51. *See generally* INTN'L TRADE COMM'N, *supra* note 3

52. Robert Scott, *Trading Away the Manufacturing Advantage*, ECONOMIC POLICY INSTITUTE (Sep. 30, 2013) http://www.epi.org/publication/trading-manufacturing-advantage-china-trade/.

53. SCOTT, *supra* note 28.

54. *Id.*

55. *Id.* at 3.

States is receiving a high volume of imports.[56] One economist opines that the trade deficit in the United States "is a consequence of its toleration of massive currency manipulation over many years by China, Japan, and about 20 other countries, the failure to eliminate widespread tariff and nontariff barriers to U.S. exports, and the failure to develop effective strategies for rebuilding U.S. manufacturing."[57]

United States national politics is always woven through the fabric of a trade agreement in that a politician is conscious of how constituents in the politician's district will react to the trade provisions that have an impact on the district. A danger in the United States is that the average voter is not particularly well-informed about international trade agreements and most of the information that the average voter does have is from the sound-bytes captured by the news media.[58] These sound-bytes tend to oversimplify the potential effects of an international trade agreement and characterize the agreement in positive or negative terms. One simplification derived from the media is that, for the United States, domestic production and export of United States-manufactured goods provides a benefit to the country;[59] another simplification from the media is that it is detrimental to the United States' economy to import goods that compete with domestically-produced goods, and United States multi-national enterprises that base a portion of their production outside the United States are depriving the United States of needed employment opportunities.[60]

A voter's task in understanding an international trade agreement is an onerous one. TPP is no exception to this generalization. TPP is a massive document of more than 600 pages, not including annexes, appendixes, and side letters, and its effect is wide in its coverage of various subject matters.[61] While trade liberalism should result in gains, one might be a little cautious when analyzing the potential effects of the new rules of origin for autos; the *ex post* effects are dependent on the varying economic strengths of the various TPP signatories and the ability of auto and auto component producers to utilize the extremely complicated rules of origin.[62]

Members of Congress have available to them research services and can hear from experts so that they can be advised on the effect of an international trade agreement.[63] Given that members of Congress are politicians, it is not unheard of

56. Douglas Irwin, *International Trade Agreements,* THE LIBRARY OF ECONOMICS & LIBERTY, http://www.econlib.org/library/Enc/InternationalTradeAgreements.html (last visited Dec. 5, 2016).

57. *Id.*

58. Michael Tomz, DEMOCRATIC DEFAULT: DOMESTIC AUDIENCES AND COMPLIANCE WITH INTERNATIONAL AGREEMENTS, Annual Meeting of the American Political Science Assoc. (Aug. 29–Sept. 1 2002),

4–5 (unpublished), available at https://web.stanford.edu/~tomz/working/apsa02.pdf.

59. *The Benefits of International Trade*, U.S. CHAMBER OF COMMERCE, https://www.uschamber.com/international/international-policy/benefits-international-trade-0 (last visited Nov. 16, 2016).

60. Moran & Oldenski, *supra* note 21.

61. *See generally* Trans-Pacific Partnership Agreement.

62. *See generally* TPP ISSUE ANALYSIS: TRADE *supra* note 36.

63. *See, e.g.*, WU, *supra* note 36; TPP ISSUE ANALYSIS: TRADE *supra* note 36.

them to place their own interpretations on the potential effects of a trade agreement.[64] Thus, what the voters hear may be an extremely partisan assessment of a trade agreement, perhaps distorted in certain respects.

The United States has long reflected a protectionist stance towards the auto industry.[65] The United States' auto industry is a powerful political force in the country for a number of reasons. The auto industry employs a great number of people and makes a significant contribution to the economy,[66] the auto unions have been active in politics,[67] and the car produced by a Detroit carmaker has an iconic place in the culture of the country.[68] However, there is a risk in listening too closely to those pressing protectionism in light of the participation of the auto industry in the global value chain.[69]

C. The Institutional Dimension

The third dimension is institutional. The institutional dimension has to do with the ability of institutions to interpret and apply the provisions of the trade agreement.[70] Customs authorities may have almost as much difficulty in interpreting the rules of origin as the businesses wishing to utilize the rules because customs and business are on a par in receiving sparse legislative guidance.[71] Given that, the customs authorities may often have to make country of origin determinations on a case-by-case basis. This interpretation may or may not coincide with the nation's trade policies or objectives, as political motivations for trade may vary over time. The businesses affected may claim the country of origin determinations are subjective and conflict with other determinations, thus offering scant guidance or predictability. Product processing and assembly methods may differ from country to country and that may lead customs authorities to assume that a product was produced by the methods employed by the domestic industry rather than the methods under which the product was in reality produced.[72]

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64. *Open argument: The case for free trade is overwhelming. But the losers need more help*, ECONOMIST (Apr. 2, 2016), http://www.economist.com/news/leaders/21695879-case-free-trade-overwhelming-losers-need-more-help-open-argument?cid1=cust/ednew/n/bl/n/20160331n/owned/n/n/nwl/n/n/AP/n; *Trade, at what price?: America's economy benefits hugely from trade. But its costs have been amplified by policy failures*, ECONOMIST (Apr. 2, 2016), http://www.economist.com/news/united-states/21695855-americas-economy-benefits-hugely-trade-its-costs-have-been-amplified-policy; Pedro Nicolaci da Costa, *The Questionable Rationale behind Washington's Antitrade Rhetoric*, PETERSON INST. FOR INT'L ECONOMICS

65. Nat'l Bureau of Econ. Res., Working Paper No. 5349 (1995).

66. SCOTT, *supra* note 28.

67. The Political Economy of American Trade Policy 163-66 (Anne O. Krueger, ed., 1996), http://www.nber.org/chapters/c8705.pdf.

68. Klier, *supra* note 10, at 2.

69. *See* Whalley, *supra* note 44, at 71.

70. ANNE VAN DE HEETKAMP & RUUD TUSVELD, ORIGIN MANAGEMENT: RULES OF ORIGIN IN FREE TRADE AGREEMENTS v-vi (2011).

71. *Id.* at 122–24.

72. Importing authorities may visit an exporter's factory to ascertain the production method. *Id.* at 118.

Tariffs can be a barrier to international trade.[73] One of the reasons that a TPP party enters into the trade agreement is the hope that a manufacturer in the country may be able to take advantage of a lower tariff on the manufacturer's product that is imported into the country of another TPP member.[74] In other words, trade among the TPP partners is liberalized by lowering tariffs.[75] The regional and global supply chains are the backbone of today's auto industry.[76] East Asia is notable in its development of regional supply chains, a number of which are important to the auto industry.[77]

An auto is an extremely complex machine often comprised of components sourced from around the world and firms within the auto industry are located internationally.[78] The international auto industry involves both market-seeking investment and efficiency-seeking investment.[79] Promotion of efficiency-seeking investment is one of the motivations for entering into a mega-regional trade agreement.[80] The auto, once assembled, is heavy and delicate.[81] For that reason, assembly plants are typically located in proximity to large markets with purchasing power.[82] Auto components are lighter and more easily transported than the cars they comprise.[83] Auto components suppliers have to keep in mind sequencing of auto production and be located where they can smoothly fit into the sequence. At the same time, lower cost inputs may contribute to profitability. Many suppliers located where they can be more efficient by taking advantage of lower labor and manufacturing costs.[84]

International sourcing of auto components necessarily means cross-border trade.[85] The risks associated with trade time delay are often more crucial than trade costs.[86] Trade patterns may influence countries entering into international trade

73. John Manzella, *The Impact of Trade Barriers,* THE MANZELLA REPORT (Jul. 1, 2016) http://www.manzellareport.com/index.php/trade-finance/378-the-impact-of-trade-barriers (last visited Jan. 21, 2016).

74. INT'L TRADE COMM'N, *supra* note 3.

75. *Id.*

76. Timothy Sturgeon et al., *Value Chains, Networks and Clusters: Reframing the Global Automotive Industry*, 8 J. ECON. GEOGRAPHY 297, 302-04 (2008).

77. *Id.* at 303.

78. *Id.* at 302–03.

79. An investor's motivation may be characterized as "market-seeking" where the geographical location has a sales potential. The "efficiency-seeking" investment is motivated by being able to take advantage of lower costs in a particular geographical location. Cecile Fruman, *Why Does Efficiency-Seeking FDI Matter?*, WORLD BANK: PRIVATE SECTOR DEV. (Feb. 5, 2016), http://blogs.worldbank.org/psd/why-does-efficiency-seeking-fdi-matter.

80. Sturgeon et al., *supra* note 76.

81. *Id.* at 303–04.

82. *Id.* at 302–03.

83. *Id.* at 304.

84. *Id.*

85. *Id.*

86. *Id.* at 299, 304, 311; Thomas H. Klier, *Determinants of Supplier Plant Location: Evidence from the Auto Industry*, 29 ECON. PERSP. 2 (3Q/2005), https://www.chicagofed.org/publications/economic-perspectives/2005/3qtr2005-part1-klier.

agreements to safeguard existing supply chains. With lean manufacturing,[87] certainty of receiving auto components in a timely fashion is extremely important to an auto manufacturer's profitability.[88] In addition, international trade agreements may cause the auto manufacturer to organize its supply chain across the countries of the trade agreement. Price elasticity means that a small change in price can have a big effect on demand and may influence a shift in the composition of the supply chain.[89]

A trade agreement may influence an auto manufacturer to shift part of its supply chain from countries outside the trade agreement to countries that are parties to the trade agreement.[90] A trade agreement can be viewed as a bargaining device that gives smaller economies the potential of greater participation in global value chains. Thus, a trade agreement may directly effect a movement in production and investment.[91] Factors important to the auto industry include predictability and certainty of market access to countries in which a portion of the value chain is located.[92] Rules of origin for autos and auto components is an important factor in an auto manufacturer developing supply chains as it permits export and import of autos and auto components at low or zero tariff.[93]

Utilization of a rule of origin is a multi-step process that tends to be inefficient.[94] A high percentage of preferences go unused because either business people are unaware that they could benefit or the costs of compliance are too high in comparison with the potential savings.[95] The first step is determining whether a product qualifies under a trade agreement by assigning a country of origin.[96] The next step is sustaining the importer's claim that the product meets the rule of origin.[97] This step involves the supplier to the manufacturing exporter, the manufacturing exporter, the importer, and the exporting and importing authorities.[98] There is usually involvement of customs brokers, vendors of trade documentation software, industry associations, and attorneys.[99] The potential final step is the one in which an importing authority may perform an audit of the claim

87. Japan pioneered the lean manufacturing production system. The basic elements of this system are "production quality, speedy response to market conditions, low levels of inventory, and frequent deliveries of parts." Klier, *supra* note 86.

88. *Id.*

89. MCKINSEY & COMPANY, THE FUTURE OF THE NORTH AMERICAN AUTOMOTIVE SUPPLIER INDUSTRY: EVOLUTION OF COMPONENT COSTS, PENETRATION, AND VALUE CREATION POTENTIAL THROUGH 2020 10–13 (2012).

90. John Manzella, *The Impact of Trade Agreements,* THE MANZELLA REPORT (Jan. 1, 1999) http://manzellareport.com/index.php/trade-finance/401-the-impact-of-trade-agreements.

91. Whalley, *supra* note 44, at 71.

92. *Id.* at 12.

93. Jonathan M. Cooper, Comment, *NAFTA's Rule of Origin and its Effect on the North American Automotive Industry*, 14 NW. J. INT'L L. & BUS. 442, 442-43, 451, 469–70 (1994).

94. VAN DE HEETKAMP & TUSVELD, *supra* note 70, at 46.

95. *Id.* at 177.

96. *Id.* at 111.

97. *Id.*

98. *Id.*

99. *Id.*

that a particular product meets the applicable rule of origin.[100] The company's documentation trail must be sufficient to withstand the audit.[101]

The company may feel the consequence of failing an audit, including delay and added scrutiny of its imports. The most minor consequence is being forced to pay the difference between the disallowed preferential tariff and the non-preferential tariff.[102] Civil penalties may be assessed by customs for non-compliance[103] and may be retroactive, possibly covering a number of years of non-compliance.[104] For a large automobile company, the penalty can be millions of dollars.[105]

II. THE AUTO INDUSTRY

Currently, multi-national carmakers world-wide compete in the automotive market. The auto and auto parts industries are integrating themselves into a global value chain and are some of the industries with the most participation in international production.[106] What has become an international production network began in the early years with a carmaker, perhaps with a headquarters located in a "home country," positioning a fragment of the production process in a country with low labor costs or close proximity and ability to complete certain auto parts.[107] For example, a close relationship between the Detroit, Michigan and Ontario, Canada car industries was a natural development given the much shorter distance between southeastern Michigan and Canada than between Detroit and southern states engaged in the car industry, such as Kentucky and Tennessee.[108] The finished component was shipped back to the home country for further incorporation into the auto or auto component.[109] Gradually, the cross-border flow

100. *Id.* at 114.

101. *Id.* at 122.

102. *Id.* at 124.

103. *See generally* 19 U.S.C.A. § 1592 (2016).

104. VAN DE HEETKAMP & TUSVELD, *supra* note 70, at 124.

105. *See* Joel K. Simon & Hillel M. Tuchman, *Decisions of the Court of International Trade Under 28 U.S.C. § 1582: The Year in Review*, 40 GEO. J. INT'L L. 243, 244–46 (2008) (assessing Ford the maximum penalty). Later, U.S. Customs and Ford entered into a stipulation that the case be dismissed and Ford escaped paying the $42 million that had previously been assessed. Beata Spuhler, *CBP and Ford Motor Company settle NAFTA recordkeeping case; recordkeeping policy under potential review* (2007), DRINKERBIDDLEGARDNERCARTON, http://www.drinkerbiddle.com/-/media/files/insights/publications/2007/12/cbp-and-ford-motor-company-settle-nafta-recordke__/cbp-and-ford-motor-company-settle-nafta-recordkeeping-case-recordkeeping-policy-under-potential-review.pdf.

106. Leticia Blázquez & Belén González-Díaz, *International Automotive Production Networks: HtWeb Comes Together*, 11 J. ECON. INTERACTION COORDINATION 119, 120 (2016).

107. Debdeep De, *Regional Trade and International Production Networks: The Context of Automobile Industry*, 10 ASIA INT'L J. TECH. MGMT. & SUSTAINABLE DEV. 77, 80 (2011).

108. Thomas H. Klier & James M. Rubenstein, *Auto Production Footprints: Comparing Europe and North America*, 39 ECON. PERSP. 101, 102 Figure 1 (2015), https://www.chicagofed.org/publications/economic-perspectives/2015/4q-klier-rubenstein [hereinafter Klier & Rubenstein].

109. Klier, *supra* note 86, at 2–3.

increased until the production process for the finished vehicle entailed multiple border crossing.[110] Another gradual change was that the auto components produced abroad became more sophisticated.[111]

The global value chain seems to have benefits for all concerned. Countries with skilled but lower-cost labor benefit from increased employment prospects for the country.[112] Countries with higher labor costs, often where carmaker headquarters are located, can outsource auto components to the lower-cost country, can produce the finished vehicle at a lower cost and can realize higher profit.[113] Consumers benefit by being able to purchase the finished vehicle at a lower price than possible were the production network limited to a single country.[114]

A. Modern History of the United States Auto Industry

During the first half of the twentieth century, United States automakers dominated the United States auto industry.[115] From the mid-1950s to 2008, the tables turned and the United States automakers lost more than forty percent of the United States market.[116] In the middle of the twentieth century, foreign carmakers began to introduce smaller cars into the United States.[117] United States carmakers could not compete in price because the cost for a United States carmaker of producing a small car was not lower than that of producing a large car; this similarity in production cost would have resulted in a smaller profit on the sale of a small car versus a large car.[118] United States drivers could indulge their taste for large cars for a while longer because of wider roads, longer driving distances, less expensive gasoline, and more disposable income.[119] Those drivers who preferred smaller cars, such as the Volkswagen Beetle, could buy imports. In the 1970s, small cars became much more popular because of the two oil crises that the nation weathered.[120] Congress mandated corporate average fuel economy standards in 1976, with fuel economy standards distorting the car market.[121] Foreign small cars sold well because of their greater fuel efficiency, competitive pricing, and perceived quality advantage.[122] It took until the late 1970s for United States carmakers to build smaller cars in the United States.[123]

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110. *Id.*
111. De, *supra* note 107, at 78.
112. Sturgeon et al., *supra* note 76, at 304.
113. *Id.* at 312.
114. *Id.*
115. Klier, *supra* note 86, at 2.
116. *Id.*
117. *Id.* at 4.
118. *Id.*
119. *Id.*
120. *Id.* at 6–7.
121. *Id.* at 8.
122. TAEKO HOSHINO, BOUNDARIES OF FIRMS AND CATCHING UP BY LATECOMERS IN GLOBAL PRODUCTION NETWORKS: THE CASE OF A MEXICAN AUTO-PARTS MANUFACTURER 20 (IDE Discussion Paper No. 492 2015), http://www.ide.go.jp/English/Publish/Download/Dp/pdf/492.pdf.
123. NAT'L RES. COUNCIL, THE COMPETITIVE STATUS OF THE U.S. AUTO INDUSTRY: A STUDY OF

The United States auto industry wields considerable political power because the auto industry is a major contributor to the United States economy. With the two gas crises of the 1970s, Japan secured a foothold in the United States market.[124] The substitution of imported cars for domestic cars was met with a political backlash in the United States to rein in car imports.[125] As a result of political pressure and at the request of the United States, Japan implemented a voluntary export restraint on Japanese cars imported into the United States in May of 1981.[126] Japan's voluntary export restraint did not lessen the demand from the United States consumer for Japanese cars. To meet this demand, Japanese car companies established assembly plants in the United States.[127] Within four years after the voluntary export restraint, Honda had established itself in Marysville, Ohio and Nissan had begun operations in Tennessee.[128] Other Japanese carmakers, including Toyota, Mazda, and Mitsubishi, followed suit.[129]

Japanese carmakers producing cars in the United States had to find suppliers of auto parts used in car manufacture.[130] Traditionally, Japanese carmakers developed long-term and cooperative relationships with their parts suppliers and were loath to discontinue that relationship and switch to an alternative parts supplier.[131] For that reason, Japanese carmakers with assembly plants located in the United States did not immediately begin sourcing parts from United States companies.[132] Besides establishing assembly plants, Japanese carmakers began to use foreign direct investment to develop parts suppliers within the United States.[133] Japanese carmakers had developed 280 parts suppliers in the United States by 1993, with half solely owned by Japanese carmakers and half joint ventures.[134]

Until the 1990's, the United States auto industry was heavily vertically integrated.[135] The industry produced many auto parts in-house; parts manufacturers in the United States and abroad produced parts not manufactured in-house.[136] The United States automakers developed detailed specifications on parts and put parts

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THE INFLUENCES OF TECHNOLOGY IN DETERMINING INTERNATIONAL INDUSTRIAL COMPETITIVE ADVANTAGE 3 (1982), http://www.nap.edu/catalog/291/the-competitive-status-of-the-us-auto-industry-a-study.

124. Klier, *supra* note 86.

125. Sturgeon & Van Biesebroeck, *supra* note 12.

126. *See generally* JAMES LEVINSOHN, CARWARS: TRYING TO MAKE SENSE OF U.S.-JAPAN TRADE FRICTIONS IN THE AUTOMOBILE AND AUTOMOBILE PARTS MARKETS (1997), *available at* http://www.nber.org/chapters/c0307.pdf [hereinafter LEVINSOHN].

127. *Id.* at 11.

128. *Id.* at 16.

129. *Id.*

130. *Id.* at 17.

131. *Id.* at 13–14.

132. Factors that encouraged Japanese carmakers to make the switch included a favorable exchange rate for United States produced parts, political pressure from the United States and the threat of domestic content legislation. *Id.* at 17.

133. *Id.* at 17.

134. *Id.*

135. *Id.* at 13.

136. *Id.*.

out for bid, hoping to obtain the lowest possible price.[137] The problems with this procedure were multifold: the relationship between the part supplier and the automaker was not a close and cooperative one; the bidding process often did not result in parts known for their quality; and the bidding process did not encourage much research and development or capital investment by the part supplier.[138] For those parts supplied from abroad, an automaker would purchase sufficient quantities so that production was not impaired by a shipping delay.[139]

In the mid-1980s, the automakers began to source out more parts, rather than produce them in house.[140] That trend continued until, in the late 1990's, GM and Ford spun off the parts divisions of their firms to create Delphi and Visteon.[141] Because the two automakers had a global presence, the two new part supplier companies also already had a global presence.[142]

B. The North American Auto Industry Today

A consumer restricting certain purchases to those products made in America may do so because of a sense of patriotism, a desire to preserve jobs in the United States, or a belief in the quality of the product.[143] Whether a car is "made in America" is not as easy to discern as it once was when the car components were produced and the car was assembled in the United States by a carmaker headquartered in the United States.[144] A United States auto consumer may obtain some information on the origin of a new car being purchased by reviewing the sticker that United States law requires be attached to the outside of the car.[145] Another indication of the origin of imported new cars and parts is the importer's use of a rule of origin to obtain a lower preferential tariff.[146] Rules of origin for autos are introduced and reviewed in the following part of this article.

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137. *Id.*

138. *Id.*

139. *Id.*.

140. Sturgeon, et al., *supra* note 76, at 305.

141. *Id.*

142. *Id.* at 305.

143. Benjamin Levin, *Made in the U.S.A.: Corporate Responsibility and Collective Identity in the American Automotive Industry*, 53 B.C. L. REV. 821, 829–36 (2012).

144. Thomas H. Klier & James M. Rubenstein, *Whose part is it?—Measuring domestic content of vehicles*, CHICAGO FED LETTER 1, 3 (Oct. 2007), https://www.chicagofed.org/publications/chicago-fed-letter/2007/october-243.

145. The American Automobile Labeling Act of 1992 (AALA) requires automakers to provide certain information to consumers on the window sticker of the new car. 49 U.S.C.A. § 32304 (1998). Pursuant to the AALA, a car is domestic if at least eighty-five percent of its content is from the United States or Canada. *Id.* § 32304(b)(1). A part is counted as domestic if at least seventy percent is from the United States or Canada. *Id.* § 32304(a)(9). A car with less than that eighty-five percent must state the two countries that contributed the highest value content and the applicable percentages. *Id.* § 32304(b)(1). The sticker must contain the city, state, and the country of assembly and the country of origin of the engine and transmission (with the United States and Canada stated separately) and, with respect to the engine or transmission, the percentage attributable to the country of origin based on direct costs, labor and assembly. *Id.* § 32304(a)(3), (a)(5), (b)(1).

146. VAN DE HEETKAMP & TUSVELD, *supra* note 70, at 82.

North America hosts seventy assembly plants, with the plants concentrated in a north-south swath, nicknamed "auto alley," primarily from Michigan through Alabama.[147] From the north end of auto alley, the auto production concentration extends from Michigan into Ontario, Canada and there is a concentration of production in central Mexico.[148] Besides vehicle assembly plants, there are several thousand plants worldwide that produce the approximately 15,000 parts that become part of a vehicle.[149]

Investment in the auto industry is capital and skills intensive.[150] The automotive industry is facing a number of pressures, including increasingly stringent fuel standards, price increases on materials such as steel, rubber, and plastic, increased labor costs, and the possibility of newly-mandated safety features.[151] Price elasticity is the responsiveness of the amount of a product demanded to the change in the price of the product. In other words, a small change in price may make a large difference in demand for a product, with a lower price significantly increasing demand and a higher price decreasing demand.[152] Price elasticity often is a factor in a manufacturer sourcing components for a product because the manufacturer is often seeking the least expensive cost for a component, yet not at the sacrifice of quality.[153] The auto industry has price elasticity such that a change in car price can have an impact on sales.[154] A carmaker has a potential bump in sales if the carmaker finds a new lower-cost supplier and passes the cost saving along to the consumer.[155] Price elasticity may lead to a manufacturer reshuffling its auto component suppliers.[156]

Lower labor costs, which are dependent on lower wages or benefits or less rigid work rules, have influenced investment to shift towards the southern United States, historically not an auto union stronghold, and towards Mexico.[157] Auto alley, together with its Canada extension, host approximately seventy-three percent of North America's auto assembly and sixty-two percent of its parts supplier plants.[158] Mexico, the other area with a concentration of auto manufacturing, hosts

147. Klier & Rubenstein, *supra* note 108, at 101–02.

148. *Id.* at 102, Figure 1.

149. *Id.*

150. Thomas H. Klier & James M. Rubenstein, *The Growing Importance of Mexico in North America's Auto Production*, CHICAGO FED LETTER 1, 2–3 (May 2013), https://www.chicagofed.org/publications/chicago-fed-letter/2013/may-310 [hereinafter *The Growing Importance of Mexico in North America's Auto Production*].

151. ARENT FOX LLP, TPP Automotive Origin Rules: The New "Rules of the Road" (Nov. 2, 2015), http://www.arentfox.com/newsroom/alerts/tpp-automotive-origin-rules-new-rules-road#.Vp2vXU1ljIU.

152. MCKINSEY & COMPANY, *supra* note 89, at 14.

153. *Id.*

154. *Id.* at 6.

155. *Id.* at 4.

156. *Id.*

157. Marcel P. Timmer, Erik Dietzenbacher, Bart Los, Robert Stehrer, & Gaaitzen J. de Vries, *An Illustrated User Guide to the World Input–Output Database: the Case of Global Automotive Production*, 23 REV. INT'L ECON. 575, 584 (2015).

158. Klier & Rubenstein, *supra* note 108, at 103.

nineteen percent of vehicle assembly plants and twenty percent of parts supplier plants.[159]

Because of the weight, size, and fragility of a finished vehicle as well as the capital tied up in it, automakers tend to locate assembly plants close to end markets.[160] The location of auto alley facilitates a finished car reaching a dealer showroom in a timely fashion. Within a one-day drive in the United States, a truck can transport a finished vehicle from an assembly plant in auto alley as far as to New York, in the far northeast extreme, or to Texas, in the far southwest extreme.[161]

The auto parts industry is stratified into vertically arranged tiers.[162] This vertical structure places automakers at the top, first-tier suppliers below the automakers, second-tier suppliers below first-tier suppliers, and third-tier suppliers below second-tier suppliers.[163] First-tier part suppliers supply the automakers, second-tier parts suppliers supply first-tier parts suppliers, and third-tier parts suppliers supply second-tier parts suppliers.[164] The parts industry is extremely dynamic and constantly subject to quick change because of competition among the parts suppliers and the innovation knowledge that diffuses among the automaker and parts suppliers.[165]

First-tier part suppliers produce specialized units.[166] Specialized units include transmissions, engines, cockpit assemblies, and rolling chassis, which are also heavy and bulky.[167] To cut transportation costs and ensure timely delivery, suppliers of specialized parts typically are clustered near auto assembly plants.[168] As high as three-quarters of the specialized parts suppliers are located within a one-day drive of an auto assembly plant.[169] Some specialized parts suppliers, including those who contribute seats, stamping, and trim, are located within an hour drive.[170]

Second-tier and third-tier part suppliers produce sub-units and parts.[171] More

159. *Id.*

160. *Id.* at 105.

161. *Id.* at 106.

162. Thomas H. Klier, *The impact of Lean Manufacturing on Sourcing Relationships*, CHICAGO FED LETTER 8, 12 (June 1993), https://www.chicagofed.org/~/media/. . ./1994/ep-jul-aug1994-part2-klier-pdf.

163. *Id.*

164. Park Tae-Hoon, *Hierarchical Structures and Competitive Strategies in Car Development: Inter-Organizational Relationships with Toyota's First-, Second- and Third-Tier Suppliers*, 6 ASIAN BUS. & MGMT. 179, 194 fig.4 (2007) [hereinafter Hoon].

165. HOSHINO, *supra* note 122, at 4.

166. Hoon, *supra* note 164.

167. Sturgeon & Van Biesebroeck, *supra* note 12, at 3–4.

168. *Id.*

169. Thomas H. Klier & James M. Rubenstein, *Who really made your car?*, CHICAGO FED LETTER (Oct. 2008), at 2, https://www.chicagofed.org/publications/chicago-fed-letter/2008/october-255a.

170. *Id.*

171. Hoon, *supra* note 164.

generic parts, such as tires, batteries, and harnesses, are lighter.[172] A supplier of this type of part can provide product to multiple automakers because a single standardized part may function in vehicles of a number of different automakers.[173] Suppliers of those more standardized parts can be located at more distant locations to take advantage of lower labor costs and economies of scale.[174]

The relationship between the automakers and first tier suppliers, on one hand, and down-stream suppliers of more standardized parts, on the other hand, is distinct. Automakers have an ongoing relationship with their first-tier suppliers that produce specialized parts and have to coordinate their activities closely with the automakers.[175] Specialized parts suppliers may be larger firms with more of a global presence in that they have subsidiaries located around the world.[176] Lower-tier suppliers of more generic parts generally do not have as close a relationship with the automakers; in addition, they may be smaller firms, and their presence may be more local or regional than global.[177] Because of these factors, lower-tier suppliers may be more vulnerable to being switched out for suppliers who can supply the generic parts at a lower cost.[178]

The Detroit Three carmakers continue to be important in politics, with politicians paying much more attention to the automakers than to their suppliers.[179] This bargaining power of the automakers means that they can force domestic parts suppliers to compete against foreign parts suppliers.[180] A lower-tier parts supplier is especially fearful of being switched out for a foreign parts supplier that can offer the same quality parts at a lower price.[181]

C. The Relationship of Canada and Mexico to the United States Auto Industry

NAFTA has encouraged Canada and Mexico to play a significant role in the North American auto industry.[182] Canada produced 12.6 percent of North American light vehicle manufacturing (including light trucks) in the first three quarters of 2015, reduced from seventeen percent in 2007, and in the first three quarters of 2015, Mexico produced 19.5 percent of North American light vehicle manufacturing.[183] Canada[184] and Mexico are similar in that their participation in

172. Sturgeon & Van Biesebroeck, *supra* note 12, at 3–4.

173. *Id.*

174. *Id.*

175. HOSHINO, *supra* note 122, at 22.

176. *Id.*

177. Sturgeon et al., *supra* note 76, at 307.

178. Sturgeon & Van Biesebroeck, *supra* note 12, at 7.

179. *Id.* at 21–22.

180. *Id.*

181. *Id.*

182. M. ANGELES VILLARREAL & IAN F. FERGUSSON, CONG. RESEARCH SERV., RL31340, NAFTA AT 20: OVERVIEW AND TRADE EFFECTS 15–16 (2014).

183. Susan Noakes, *Trans-Pacific Partnership divides auto parts industry: Canadian tariffs on autos and parts lowered over 5 years, but over 25 years in U.S.*, CBC NEWS (Oct. 29, 2015), http://www.cbc.ca/news/business/tpp-auto-parts-sector-1.3292456.

184. CHARLOTTE YATES, HOW CAN PUBLIC POLICY SUSTAIN A COMPETITIVE CANADIAN AUTO

the auto manufacturing process has been dependent on foreign firms locating operations in Canada and Mexico.[185]

The United States and Canada have run an integrated auto production operation since the 1960s.[186] The operation was centered in the Great Lakes region and included Indiana, Illinois, Michigan, Ohio, Ontario, and Wisconsin.[187] Auto production coordination began in 1965 when the United States and Canada signed the Automotive Products Trade Agreement, commonly referred to as the "Auto Pact."[188] Since then, Canada has run a negative trade balance with the United States on auto parts and a positive trade balance with the United States on finished vehicle.[189] Those trade balances are an indication that many auto parts were imported into Canada from the United States, primarily and, from those imported parts, Canada produced many cars of a limited number of models, a substantial portion of which were exported to the United States.[190]

The health of the Canadian auto industry has been variable from 1990 to the present. The 1990s was a good decade for the Canadian auto industry, with the peak in 1999.[191] From 2000 to 2007, there was a decline in Canada in new vehicle production, which hit bottom in 2009 with the economic crisis.[192] Canadian new vehicle production started to pick up after the crisis but then began to decline again because of loss of production facilities to the United States and Mexico and the loss of a Canadian vehicle assembly plant.[193] The year 2008 was significant for the Canadian auto industry because Canadian auto production fell back to the level of 1987 at fourteen percent of North American production.[194] In that same year, the percentage of Mexican auto production in North America, at twenty percent, first exceeded that of Canada.[195]

Statisticians monitoring Canadian auto and auto parts industries keep close watch on Canada's balance of trade with its trading partners. Since 2009, the Canadian positive automotive balance of trade within North America has declined, mostly due to Mexican autos and auto parts being imported into Canada.[196] Canada's largest trading partners in autos and auto parts other than in North America are the European Union, China, Japan, and South Korea.[197] As far as both

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INDUSTRY? 3 (2015).

185. Klier & Rubenstein, *supra* note 108, at 1.

186. JOHN HOLMES, WHATEVER HAPPENED TO CANADA'S AUTOMOTIVE TRADE SURPLUS?: A PRELIMINARY NOTE 3 (2015), https://aprc.mcmaster.ca/sites/default/files/pubs/aprc-canada-trade-deficit-holmes-report.pdf.

187. *Id.*

188. *Id.*

189. *Id.*

190. *Id.*

191. *Id.*

192. *Id.* at 4.

193. *Id.*

194. *Id.*

195. *Id.*

196. *Id.*

197. *Id.* at 6.

autos and auto parts are concerned, Canada runs a negative trade balance with each of these four trading partners.[198] Between 1998 and 2008, Canada's negative trade balance in finished vehicles was impacted heavily by Japanese imports and later by imported finished vehicles from the European Union and South Korea.[199] Since 2004, Canada's negative trade balance in auto parts has been negatively impacted by an increase in auto parts imports from Korea and a sharp increase in auto parts imports from China.[200] Significantly, Canada's negative automotive trade balance with countries outside of NAFTA was greater in 2013 and 2014 than Canada's positive trade balance with the United States.[201]

Early on, the Mexican auto industry was an import substitution industry.[202] In 1962, Mexico adopted a protectionist auto policy that had a significant impact on the country.[203] The 1962 policy:

> 1) banned imports of auto engines and certain other auto parts;
>
> 2) banned imports of completed autos;
>
> 3) mandated that sixty percent of the auto parts used in autos manufactured in Mexico be of domestic origin; and
>
> 4) mandated that auto parts suppliers have at least sixty percent Mexican ownership.[204]

The objective of the 1962 policy was to attract the auto industry to Mexico to sell vehicles to the growing Mexican market.[205] By the mid-1960s, VW and Nissan had established a presence in Aguascalientes and Puebla, both located in proximity to Mexico City.[206]

The Mexican auto industry saw further changes in the 1980's and 1990's. In the 1980's, GM and Ford located plants in northern Mexico to produce autos destined for the United States.[207] NAFTA made a substantial change in the Mexican auto industry because Mexico loosened its prior restrictions.[208] With NAFTA, the twenty percent import duty that Mexico charged on light vehicles was reduced to zero over ten years for Canadian and United States imports.[209] The minimum content of Mexican content for Mexican-produced cars was reduced from between thirty-four and thirty-six percent to zero over ten years.[210] After 2004, 62.5% of the content had to be from a NAFTA country for duty-free export

198. *Id.* at 6.
199. *Id*
200. *Id.*
201. *Id.* at 7.
202. HOSHINO, *supra* note 122, at 5.
203. Klier & Rubenstein, *supra* note 108, at 1.
204. *Id.* at 1–2.
205. *Id.* at 2.
206. *Id.*
207. *Id.*
208. *Id.*
209. *Id.*
210. *Id.*

from Mexico to another NAFTA country.[211]

Prior to NAFTA, the Mexican auto industry had begun to transition from an import substitution industry to an export industry.[212] Five automakers, Chrysler, Ford, GM, Nissan, and VW, had already established a presence in Mexico.[213] Those five automakers had a head start when NAFTA took effect and encountered lower barriers to taking advantages to the NAFTA provisions concerning autos.[214] Subsequently, Honda and Toyota established a production presence in Mexico. Mazda and Audi have either established a presence in Mexico or announced plans to do so.[215] Lower labor cost encourages certain auto industry production in Mexico.[216] For example, Mexico can still make a profit, albeit slim, on sub-compact cars and compact cars, and is attractive to manufacture that is labor intensive.[217]

Mexico's auto industry is primarily an export market.[218] In 2012, Mexico ranked fourth in the world in auto exports behind Germany, Japan, and South Korea.[219] There are several factors in Mexico's favor.[220] Lower labor costs make Mexico an attractive location;[221] fairly low shipping costs make exports of cars from plants located in northern Mexico to the United States feasible;[222] location of auto plants near the Pacific Ocean facilitates export of Mexican-manufactured cars to Asia;[223] and Mexico has signed free trade agreements with over forty countries, including those with the European Union and Japan.[224]

III. RULES OF ORIGIN FOR AUTOS

Application of the TPP rules of origin determines the derivation country of a product, such as an auto or an auto component, and the TPP rules of origin are designed to confine the benefit of the reduced preferential tariff under TPP to those autos and auto components manufactured and whose input is from the TPP parties.[225] Under TPP, the tariff is generally reduced for autos and auto components exported into one of the TPP countries so long as the exporter meets the requirements of TPP rules of origin and the importer has the appropriate supportive documentation.[226] The purpose of the rules of origin is to limit the

211. *Id.*
212. HOSHINO, *supra* note 122, at 5.
213. Klier & Rubenstein, *supra* note 108, at 2.
214. *Id.*
215. *Id.* at 2–3.
216. *Id.* at 3.
217. HOLMES, *supra* note 186, at 4.
218. *Id.* at 3; Klier & Rubenstein, *supra* note 108, at 3.
219. Klier & Rubenstein, *supra* note 108, at 3.
220. *Id.*
221. *Id.*
222. *Id.*
223. *Id.*
224. HOLMES, *supra* note 186, at 4; Klier & Rubenstein, *supra* note 108, at 3.
225. INT'L TRADE COMM'N, *supra* note 3, at 225.
226. *Id.*

benefits of a preferential trade agreement, like TPP, to the parties to the trade agreement.

A. Tariff Reduction Schedules

Tariff reduction schedules are important in that they specify the time period over which tariffs on autos and auto parts will be reduced and in what amounts.[227] Neither tariff reduction schedules nor the present tariff rates are uniform among the various TPP parties.[228] For the countries that already have a free trade agreement with the United States, there would be a zero tariff on imports of United States cars into those countries.[229] With certain countries, the tariff reductions extend over a period of time and can be back loaded. For example, the tariff reduction period on cars imported from Japan into the United States spans twenty five years and the reduction begins in year fifteen.[230] Brunei and New Zealand will reduce tariffs on imports of United States cars over ten years, as will Malaysia and Vietnam for certain tariff classifications.[231] For Malaysia and Vietnam, the tariff on certain tariff classifications will not be reduced until TPP has been in force for thirteen years.[232]

The tariff reduction schedule for some countries has received discussion.[233] The tariff reduction schedule for chapter 87 of the harmonized system,[234] which is the automotive chapter, is viewed in an overall positive light.[235] The lengthy and back-loaded nature of the tariff reduction schedule was welcomed by some because of Japan's past unwillingness to open its auto industry to competition.[236] Some are disappointed that the full tariff reduction for Malaysia and Vietnam for some of the most important tariff classifications extends over thirteen years.[237] The United States automotive industry may see a decrease in exports to Canada when Canada eliminates tariffs on Japanese cars in year six.[238]

Rules of origin are meant to rectify the "free-rider" problem[239] and blatantly

227. *Id.* at 238–39, tbl.4.11.

228. Each TPP party's commitment to eliminate tariffs is specified on its Schedule to Annex 2-D.

229. INT'L TRADE COMM'N, *supra* note 3, at 238.

230. *Id.* at 238–39, 239 tbl.4.11.

231. *Id.* at 238–39, 239 tbl.4.11.

232. *Id.* at 238–40, tbl.4.11, tbl.4.12.

233. INDUST. TRADE ADVISORY COMM. ON AUTO. EQUIP. & CAPITAL GOODS, THE TRANS-PACIFIC PARTNERSHIP TRADE AGREEMENT 5 (2015), https://ustr.gov/sites/default/files/ITAC-2-Automobile-Equipment-and-Capital-Goods.pdf [hereinafter INDUST. TRADE ADVISORY COMM.].

234. Trans-Pacific Partnership Annex 3-D, at 15765.

235. INDUST. TRADE ADVISORY COMM., *supra* note 233, at 5.

236. *Id.*

237. *Id.*

238. INT'L TRADE COMM'N, *supra* note 3, at 232.

239. One reason for a country to become a party to TPP is to have autos and auto components produced in the TPP-member country benefit from preferential tariff rates. An auto component supplier located in a non-TPP country might still indirectly benefit, in other words become a free-rider, if the component was incorporated into an auto that received a preferential tariff. *See* Chris Brummer, *Regional Integration and Incomplete Club Goods: A Trade Perspective*, 8 CHI. J. INT'L L. 535, 536, 548–49 (2008).

discriminate against other, non-TPP, countries benefitting from the lower tariffs under TPP.[240] For example, without the rules of origin, a non-TPP country could try to free-ride on the lower TPP tariff and circumvent TPP by shipping a product to a TPP country and, from there, shipping the same product to another TPP country. For that reason, the rules of origin are extremely politically protectionist and are reflective of the nationalist tendencies of the parties to the trade agreement.[241]

One might take Australia as an example. Australia receives a significant volume of imported finished cars and complex parts from the United States and Japan.[242] To take advantage of the reduced preferential tariff offered by Australia under TPP, the United States and Japan will have to be cognizant of and meet the limits on non-originating components under TPP for those cars and car components imported into Australia.[243]

B. Club Goods

In considering the rules of origin for autos under TPP, benefits of a regional trade agreement could be considered club goods.[244] The idea of club goods is an economic theory[245] that views the members of the trade agreement like members of a private club. Part of the attraction of the private club is that it is exclusive in that members are admitted to the club based on certain preconditions and non-members are discriminated against in not receiving the advantages available to club members.[246] Joining the club is enticing with the prospect of participating in new opportunities. There is also fear of being excluded from the popular group if one does not join.[247]

Central to the TPP are reciprocal trade concessions from the twelve TPP parties in which each party lowers certain tariff or non-tariff barriers to trade in exchange for concessions from other parties so as to open market access among the parties.[248] The hope is that all parties will benefit, but the benefit varies from party to party and from sector to sector. There are several club goods effects of TPP. One club goods effect is that TPP parties obtain access to new markets at a lower tariff rate than previously.[249] For example, Malaysia and Vietnam presently have tariffs on auto components that can reach the high of seventy percent.[250] To tariff "jump" or "hop" the high tariff, some multi-national companies in the automotive

240. INT'L TRADE COMM'N, *supra* note 3, at 238–39.

241. INDUST. TRADE ADVISORY COMM., *supra* note 233, at 3–4, 6–7.

242. WU, *supra* note 36, at 1. In the past, Australia was an auto manufacturer. However, Ford, Holden, and Toyota will be ceasing auto manufacturing in Australia. ECONOMICS REFERENCES COMMITTEE, FUTURE OF AUSTRALIA'S AUTOMOTIVE INDUSTRY: INTERIM REPORT 57 (2015).

243. WU, *supra* note 36, at 2–3.

244. Brummer, *supra* note 239, at 536–37.

245. *Id.*

246. *Id.* at 540–41.

247. *Id.*

248. Whalley, *supra* note 44, at 69–70.

249. ARENT FOX LLP, *supra* note 151.

250. *Id.*

industry located production in those countries.[251] With a lower tariff under TPP, those companies that are in the mode of consolidating their interests may rethink whether they want to keep production there.[252] Another club goods effect is that TPP parties can use cheaper auto parts from some TPP countries in the auto manufacturing process.[253] For example, a number of Japanese part suppliers rely on cheaper inputs from Malaysia and Vietnam.[254]

Sometimes the club members are unsuccessful in keeping club goods to themselves and non-club members reap an indirect benefit when the benefits of the club spillover to the benefit of non-members. A spillover effect in the auto industry is where automakers or auto parts suppliers are able to incorporate parts from non-TPP countries, yet still comply with the rules of origin.[255] A firm would do this if use of parts from non-TPP countries result in a cost savings for the firm.[256] Whether a spillover effect is advantageous or not is dependent on a firm's geographical location and the tier at which the firm is situated in the auto industry.[257]

C. Regulatory Opportunism

A country that is not a member of a trade agreement may attempt to take advantage of club goods that spillover from the closed circle of parties to the trade agreement. The action of a non-member taking what members of the trade agreement likely view as an unfair advantage may be seen as opportunistic because the trade agreement was established to restrict the benefit of club goods to the member of the club.[258] Parties to the trade agreement may view outsiders as untrustworthy and trade agreement parties may fear that outsiders are acting out of ulterior motives.[259] One of the goals of the regulations within a trade agreement is to reduce opportunistic behavior.[260] The spillover effect may mean that a non-TPP member is engaging in regulatory opportunism. However, regulatory restrictions, such as rules of origin, are not fool-proof and regulatory opportunism may be a product. The distrust held by TPP members may raise a perception that a non-member is thus gaining an advantage that was not negotiated by the non-member.[261]

The countries most worrisome at this point in receiving spillover benefits from TPP appear to be China and Thailand, but other countries in Asia could be of

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251. *Id.*
252. *Id.*
253. *Id.*
254. *Id.*
255. *Id.*
256. *Id.*
257. WU, *supra* note 36, at 2–3.
258. Daron Acemoglu & Alexander Wolitzky, *Cycles of Distrust: An Economic Model* 2 (Nat'l Bureau of Econ. Research No. 18227, 2012).
259. Nat'l Bureau of Econ. Research, Working Paper No. 18257; *Id.*
260. Beth V. Yarbrough & Robert M. Yarbrough, *Economic Integration and Governance: The Role of Preferential Trade Agreements*, 5 J. INT'L ECON. INTEGRATION No. 2, 1, 1 (1990).
261. Acemoglu & Wolitzky, *supra* note 258, at 1.

concern in the future. China and Thailand are worrisome because they can produce auto parts at a cost savings over other countries.[262] An example of the potential spillover effect of the rules of origin is that Japan could use parts from non-TPP countries, such as China and Thailand, in its manufacture of autos and auto parts, yet still comply with the TPP rules of origin. Currently, China supplies the most auto body parts, airbags, and miscellaneous auto parts to Japan as well as supplying the most brakes and wheels to Japan and the United States.[263]

Of course, use of Chinese and Thai parts is not limited to Japan and the United States is not the only country concerned whether the lower mandated percentages under the TPP rules of origin will result in a spillover effect.[264] Canadian auto parts producers located in Ontario, Canada that currently sell to the Canadian or United States auto industries may be replaced by suppliers of lower-cost imports from China and Thailand.[265] On the other hand, Canadian automakers could benefit by switching from higher cost Canadian parts to lower-cost Chinese and Thai parts.[266]

D. Substantial Transformation

Historically, the concept of "substantial transformation"[267] was the key in the United States for determining whether a product originally from a foreign jurisdiction has undergone a process domestically such that it could be considered as originating domestically.[268] An understanding of the term helps one understand some of the methods commonly used in various rule of origin schemes, including TPP.[269] When considering application of a preferential tariff under a preferential trade agreement, one step in the process is to distinguish between an originating and non-originating product by examining if the manufacturing process has substantially transformed the non-originating input to the product.[270]

The genesis of the transformation concept was dependent on two United States Supreme Court cases. The first case, *Hartranft v. Wiegmann*,[271] was decided in 1887 and the second case, *Anheuser-Busch Brewing Association v. United States*, [272] was decided in 1908. In *Hartranft*, the issue was whether a

262. TPP ISSUE ANALYSIS: TRADE, *supra* note 36, at 18.

263. Matthew Schewel, *TPP Auto ROO Most Likely To Hurt Makers Of Less Complex Parts: Experts (2016)*, INSIDE TRADE, http://insidetrade.com/share/152178 (last visited Feb. 6, 2017).

264. Noakes, *supra* note 183.

265. *Id.*

266. *Id.*

267. The test to determine whether substantial transformation has taken place "is whether the good has emerged from a given process with a 'distinctive name, character or use' in a particular state." Joseph A. LaNasa III, *Rules of Origin under the North American Free Trade Agreement: A Substantial Transformation into Objectively Transparent Protectionism*, 34 HARV. INT'L L.J. No. 2, 381, 384 (1993) (quoting *Anheuser-Busch Brewing Ass'n v. United States*, 207 U.S. 556, 562 (1908)).

268. *Id.* at 384–85.

269. VAN DE HEETKAMP & TUSVELD, *supra* note 70, at 74–75.

270. *Id.*

271. *Hartranft v. Wiegmann*, 121 U.S. 609, 609–611 (1887).

272. *Anheuser-Busch Brewing Ass'n v. U.S.*, 207 U.S. 556, 562 (1908).

manufacturing operation had been performed on a product such that customs authorities would impose a higher duty on the product.[273] The Court formulated the idea that the product must be changed in character for customs to conclude that the product had been manufactured.[274] In this case, the Philadelphia customs district had charged J. H. Wiegmann & Son a thirty-five percent ad valorem duty when the firm imported shells into the United States from London on the basis that they fell into the category of manufactured shells.[275] The firm's position was that no duty was owed because the shells were not manufactured.[276] The firm stated: "These shells have [simply] had the outer layer ground off so as to exhibit the beautiful inner layer. That has been done by the application of a wheel, and afterwards by polishing."[277] The United States Supreme Court sided with Wiegmann, the importer, and found that the shells did not fall into the category of manufactured shells.[278] The Court stated: "They were still shells. They had not been manufactured into a new and different article, having a distinctive name, character, or use from that of a shell."[279]

The United States Supreme Court relied on the reasoning of *Hartranft* when the Court used the word "transformation" in 1908 in *Anheuser-Busch Brewing Association v. United States*.[280] In that case, Anheuser-Busch had paid a duty when it imported cork from Spain to use in bottling beer.[281] The beer bottled using the corks originating from Spain was later exported and the case arose after the beer was exported.[282] The brewer wanted to use a "drawback" provision of customs regulation that would have permitted the brewer to obtain a refund of the customs duty paid when the cork was originally imported from Spain.[283] The brewer's argument was that the refund was due because the brewer had performed a manufacturing operation on the cork to prepare it for use in the bottling process and the cork was subsequently re-exported.[284] For the time period, the potential refund was the quite sizable amount of $10,995 USD paid on 73,299.78 pounds of imported cork.[285] The Court disagreed with the brewer and found that the brewer was not due the refund because the cork had not undergone a manufacturing operation as required under the customs regulation: "There must be transformation; a new and different article must emerge, 'having a distinctive name, character, or use.' This cannot be said of the corks in question."[286]

273. *See Hartranft*, 121 U.S. at 613–14.
274. *Id.* at 615.
275. *Id.* at 610, 613.
276. *Id.* at 610, 615.
277. *Id.* at 611.
278. *Id.* at 615.
279. *See Hartranft*, 121 U.S. at 615.
280. *Anheuser-Busch*, 207 U.S. at 562.
281. *Id.* at 559, finding 3.
282. *Id.* at 558.
283. *Id.*
284. *Id.* at 562–63.
285. *Anheuser-Busch*, 207 U.S. at 564.
286. *Id.* at 562.

The substantial transformation rule has not necessarily been applied over the years in a consistent, predictable, or coherent fashion, perhaps because of the subjectivity necessarily inherent in the test.[287] One reason for including detailed rules of origin in a preferential trade agreement is to make determination of whether a product is originating or non-originating more consistent and to avoid problems encountered in administering the rules of origin in prior trade agreements.[288] Although detailed rules of origin may lead to more consistent application, the rules of origin in recent preferential trade agreements have become so complicated that their utilization may require teams of attorneys and professionals trained in customs matters to interpret them.[289] Some of the complication may come from the fact that individual provisions of the rules of origin are the result of lobbying by some industry of a particular country to draw intricate lines carving out benefits for itself. There are some common principles running through the rules of origin in the various preferential trade agreements;[290] however, there is not a match between the differing rules of origin schemes of the many trade agreements.

E. Basic Principles on Rules of Origin for Autos

Prior to delving into the complicated specifics of the TPP rules of origin, it might be helpful to provide some principles common to rules of origin. Rules of origin are designed to handle multi-country transactions in which various components of a manufactured item and its assembly take place in different locations around the globe.[291] A preferential trade agreement, like TPP, distinguishes between "originating" goods, which come from a country within the preferential trade agreement, and "non-originating" goods, which come from a country outside the preferential trade agreement.[292] Even if material or a part is non-originating because it was imported into a TPP country from a non-TPP country, it could be deemed originating if it were substantially transformed in a country within the preferential trade agreement.[293]

Rules of origin for autos are extremely complicated and the complication is meant to draw fine lines to distinguish between originating and non-originating goods so that TPP countries achieve the bargained-for protection for sensitive industries.[294] Complying with the rules of origin is a huge expense for a company and the company may have a whole staff to deal with the documentation from the

287. *See Generally,* DONALDSON COMPANY, INC., RULES OF ORIGIN, https://www.donaldson.com/en/supplier/compliance/origin.pdf.

288. William J. Kovatch, Jr., *The NAFTA's Rules of Origin, Certificate of Origin, and Record-keeping Requirements: The Disadvantage to Small Businesses*, 12 TRANSNAT'L LAW. 403, 409 (1999).

289. *Id.* at 417–19.

290. VAN DE HEETKAMP & TUSVELD, *supra* note 70, at 98–104.

291. DONALDSON COMPANY, INC., *supra* note 287.

292. WU, *supra* note 36, at 1.

293. *Id.* at 2–3.

294. TPP RULE OF ORIGIN IS 45%, *supra* note 37.

product components.[295] TPP Articles 3.20 through 3.26 concern the certificate of origin requirements,[296] Article 3.27 concerns verification of the certificate of origin by the country into which the good is imported,[297] Articles 3.28 through 3.29 concern claims,[298] Article 3.30 concerns penalties,[299] and Article 3.31 concerns confidentiality.[300] The advantage of using the rules of origin can be sizable for a big company such as an automaker.[301] A big company cumulating a very low drop in cost for each of a high number of products can still find using the rules of origin profitable because the cost saving in tariff exceeds the cost spent in utilizing the rules of origin.[302] For a big car company, the company can make good use of the rules of origin for cost saving.

Some producers fail to use rules of origin even though their use would decrease the amount of tariff paid to have a product clear customs.[303] As more fully described below, implementing the rules of origin of a trade agreement can be quite complicated and require keeping detailed records.[304] The utilization of rules of origin is based on gains from complying with the rules of origin being higher than the total of: a) costs of complying with the rules of origin; and b) the reduction in tariffs.[305]

Three principles provide the foundation for the multi-country rules of origin. The three principles are:

1) tariff shift;

2) value percentage criteria; and

3) specified process.[306]

These three principles are tools used to determine whether substantial transformation has occurred.[307]

A good within a particular tariff classification may shift to fall into a different tariff classification after undergoing processing or manufacture. The tariff shift principle permits a good originating outside any TPP country to be considered originating in a TPP country if the non-originating good was substantially transformed in the TPP country.[308] The value percentage criteria is based on a

295. Kovatch, *supra* note 288, at 417–19.

296. Trans-Pacific Partnership Agreement, ch. 3, arts. 3.20–3.27, Nov. 12, 2011, https://ustr.gov/sites/default/files/TPP-Final-Text-Rules-of-Origin-and-Origin-Procedures.pdf.

297. *Id.* ch. 3, art. 3.27.

298. *Id.* ch. 3, arts. 3.28–3.29.

299. *Id.* ch. 3, art. 3.30.

300. *Id.* ch. 3, art. 3.31.

301. Kovatch, *supra* note 288, at 419.

302. *Id.*

303. *Id.*

304. *Id.* at 417–18.

305. *Id.* at 417–19.

306. INT'L TRADE COMM'N, *supra* note 3, at 236–37.

307. David Palmeter, THE WTO AS A LEGAL SYSTEM ESSAYS ON INTERNATIONAL TRADE LAW AND POLICY, 154–55 (2003).

308. INT'L TRADE COMM'N, *supra* note 3, at 226.

comparison between the domestic and foreign content of a good.[309] It requires that the imported good either contain a minimum percentage of originating content or that the imported good not exceed a maximum non-originating content.[310] The specified process principle permits a good that was originally non-originating to be considered originating if the non-originating good underwent a process in a TPP country that substantially transformed it.[311]

Although use of one of the three principles would seem to provide clarity not inherent in the determination of whether a substantial transformation has occurred, none of the three principles is entirely foolproof in producing coherent results.[312] In addition, a particular rule of origin for a particular industry may combine the use of two or more of the three principles described in this section.[313]

The use of a tariff shift is dependent on the intersection between the Harmonized Commodity Description and Coding System, often referred to as the Harmonized System, and the rules of origin of a particular trade agreement.[314] The elaborate nature of the Harmonized System, more fully described in the following section, might make one think that use of tariff shift provisions leads to consistent and predictable results.[315] The purpose of the Harmonized System was to be able to classify a wide range of imported products and generate import statistics; however, the purpose of the Harmonized System was not to enable determination of when a preferential tariff should be applied.[316] One problem is that different customs authorities may classify different goods differently and thus assign different tariff codes to the same good.[317] The tariff codes may not be sufficiently detailed for some products in that substantial processing of a particular product may not result in a tariff shift. This happens when a processed product continues to be classified under the same tariff code as the inputs for the product.

There is another problem with the tariff shift principle. The rules of origin in a trade agreement are typically negotiated with the purpose of protecting certain sensitive industries.[318] To do so may considerably lengthen the rules of origin because the negotiators must include tariff shift schedules comprised of tables of various tariff codes, often with reference to detailed exceptions.[319] Deciphering the effect of tariff shift schedules requires knowledge of the Harmonized System and some experience working with it.

The value percentage criteria is not without its problems. Determining value percentage requires an intensive accounting exercise, yet accounting methods are

309. David Palmeter, *supra* note 307.
310. *Id.* at 236–37.
311. *Id.*
312. VAN DE HEETKAMP & TUSVELD, *supra* note 70, at 122–24.
313. *See, e.g.,* INT'L TRADE COMM'N, *supra* note 3, at 236–37.
314. LaNasa, *supra* note 267, at 388.
315. *Id.* at 390.
316. *Id.* at 391.
317. VAN DE HEETKAMP & TUSVELD, *supra* note 70, at 122–24.
318. WU, *supra* note 36, at 2, 3.
319. Whitten, *supra* note 36.

not consistent throughout the world.[320] The elaborate accounting exercise must be backed up with documents to protect the importer should the customs administration decide to audit the cost of materials and production on which the customs declaration was based.[321] The results of the calculation are not necessarily consistent, given that the currency exchange rates and prices of inputs likely vary over time and labor and other production costs vary from country to country.[322]

The specified process principle seems to be more straightforward at first glance. It is designed to distinguish a process that substantially transforms a good from a process that is minimal or that can be done easily with minimal equipment, such as a screwdriver.[323] One drawback is that the principle lengthens the rules of origin because the covered processes must be stated in sufficient detail so that there can be an understanding of what a particular process means.[324] There still may be a disagreement between the customs authorities and the firm claiming the preferential treatment as to whether the operation performed falls within a particular process category specified in the rule of origin.[325] Another drawback is that future technology may not be adequately covered in the rules of origin because the technology was non-existent when the trade agreement was negotiated.

F. The Harmonized System Description and Coding System

The tariff shift principle requires an understanding of tariff schedules. The World Customs Organization[326] developed the Harmonized System,[327] which classifies roughly 5,000 commodity groups and identifies each group by a six-digit code.[328] More than 200 countries use the system for its original purpose of tracking trade passing across international boundaries;[329] however, the system was not originally developed as a tool for duty classification nor determination of country of origin.[330] TPP requires use of the Harmonized System to determine rules of origin and tariffs imposed on an auto or auto component imported into a TPP country when the importer relies on a tariff shift provision of TPP.[331]

The Harmonized System is comprised of six-digit codes.[332] The first two digits are referred to as the *chapter*, the first four digits are referred to as the

320. Raj Gnanarajah, *U.S. Capital Markets and International Accounting Standards*, *in* ACCOUNTING METHODS & STANDARDS & BONUS DEPRECIATION: SELECTED ANALYSES (Suzanne Thomas ed., 2016) 1–2.

321. VAN DE HEETKAMP & TUSVELD, *supra* note 70, at 115–17.

322. *Id.*

323. *Id.*

324. *Id.*

325. *Id.*

326. *Id.*

327. *Id.*

328. Peggy Chaplin, *An Introduction to the Harmonized System*, 12 N.C. J. INT'L L. & COM. REG. 417, 426 (1987).

329. *Id.*

330. LaNasa, *supra* note 267, at 391.

331. INT'L TRADE COMM'N, *supra* note 3, at 226.

332. Chaplin, *supra* note 328, at 426.

heading, and the entire six digits are referred to as the *subheading*.[333] Countries that want more detail are at liberty to add additional digits, but any digits above six are country-specific.[334]

Certain portions of the Harmonized System are critical to the auto industry.[335] Subheadings 8407.33 and 8407.34 corresponds to vehicle engines;[336] subheading 8544.30 corresponds to wire harnesses.[337] Heading 8703 corresponds to passenger vehicles.[338] A number of subheadings within heading 8708 are important to the automotive industry; these include 8708.29 (vehicle body parts);[339] 8708.30 (brakes and parts);[340] 8708.40 (transmissions);[341] 8708.70 (road wheels and parts);[342] 8708.94 (steering wheels);[343] airbags (8708.95);[344] 8708.99 (miscellaneous motor vehicle parts).[345] An example of product-specific rules of origin that is provided later in this Part references some of these tariff lines.

G. Basic TPP Provisions Impacting Rules on Origin

Rules of origin are obscure and technical in nature. Determining if an auto or auto component meets the TPP rules of origin is an exercise of patience. Under TPP,[346] one must consider: 1) Chapter 3; 2) Annex 3-D (to Chapter 3); and 3) Appendix 1 (to Annex 3-D).[347]

Chapter 3 of TPP encompasses rules of origin basic provisions.[348] Section A of Chapter 3 (Articles 3.1 through 3.18) comprises substantive provisions;[349] and Section B of Chapter 3 (Articles 3.19 through 3.32) comprises procedures.[350] Annex 3-D to Chapter 3, which is 212 pages in length, contains the product-specific rules of origin.[351] The product-specific rules of origin of Annex 3-D are based on the principles of tariff shift and regional value content.[352] An example of portions of this Annex is included later in this part.[353] Appendix 1 to Annex 3-D

333. *Id.*
334. *Id.*
335. *See* Trans-Pacific Partnership Agreement, Annex 3-D, at 96–97, 154, 157–65.
336. *Compare* Annex 3-D, at 96–97, *with* Annex 3-D app. 1, at 2–3.
337. *See* Trans-Pacific Partnership Agreement, Annex 3-D, at 154.
338. *Id.* at Annex 3-D, at 157.
339. *Compare* Annex 3-D, at 158, *with* Annex 3-D app. 1, at 2.
340. *Compare* Annex 3-D, at 159, *with* Annex 3-D app. 1, at 3.
341. *Id.*
342. *See* Trans-Pacific Partnership Agreement, Annex 3-D, at 159.
343. *Compare* Annex 3-D, at 160, *with* Annex 3-D app. 1, at 3.
344. *Compare* Annex 3-D, at 161, *with* Annex 3-D app. 1, at 3.
345. *Id.*
346. Trans-Pacific Partnership Agreement, https://ustr.gov/tpp/.
347. Trans-Pacific Partnership Agreement, ch. 3, Annex 3-D, Annex 3-D app. 1.
348. Trans-Pacific Partnership Agreement, ch. 3 Exec. Summary.
349. *Id.* at 3.1–3.18.
350. *Id.* at 3.19–3.31.
351. *Id.* Annex 3-D.
352. INT'L TRADE COMM'N, *supra* note 3, at 226.
353. *Infra* note 392 and accompanying text.

has provisions that directly relate to autos and auto parts.[354] Appendix 1 is only three pages long, but it contains three tables, designated as tables A, B, and C.[355] Table B is based on specific processes, the third principle of rules of origin.[356]

Autos and auto components meet the TPP rules of origin if they fall into one of three categories (TPP Article 3.2) and otherwise comply with chapter 3.[357] TPP Article 3.6 permits a material originating from a non-TPP country to be considered originating when it undergoes a substantial transformation.[358] TPP Article 3.10, the accumulation provision, permits an originating product from any TPP country to count toward the threshold.[359]

When reviewing the three categories of TPP Article 3.2, the first and the second categories seem to be the easiest to understand and comply with.[360] In simple terms, the first category is comprised of raw materials, including minerals, mined from a TPP party; the second category is comprised of products manufactured within a TPP party from materials originating within a TPP party, but the materials may contain materials sourced from a non-TPP country.[361] For example, a TPP country could import pig iron that the country processes into cast iron, which is used to make the auto engine.[362] The cast iron portion of the auto engine would be originating.[363] For the finished auto engine to fall within the second category, every other part in the engine besides that cast iron portion must be originating.[364] The third category is satisfied if the product meets the product-specific rules of origin.[365] Because of the multi-country nature and complexity of the manufacturing involved in the automobile industry, chances are that producers in the industry will have little occasion to use either of the first two categories of the rules of origin with the exception, perhaps, of second-tier or third-tier suppliers of very basic auto components.[366]

The third category of rules of origin will be crucial to the automotive industry in claiming preferential tariff treatment and is the category most often used by the auto industry.[367] The two basic divisions within the third category are tariff shift, meaning that the tariff classification for a good has changed, and regional value content.[368] To use regional value content, a producer must have at least a minimum

354. Trans-Pacific Partnership Agreement, Annex 3-D app. 1.
355. *Id.* at 1–3.
356. *Id.* at 2.
357. Trans-Pacific Partnership Agreement, ch. 3, art. 3.2.
358. *Id.* art. 3.6.
359. *Id.* art. 3.10.
360. *Id.* art. 3.2(a), (b).
361. INT'L TRADE COMM'N, *supra* note 3, at 225–26.
362. *Id.* at 226.
363. *Id.*
364. *Id.*
365. *Id.*
366. *Id.* at 225–26.
367. *Id.* at 236.
368. *Id.*

regional value content by performing a quantitative analysis.[369] This means that at least a certain portion of the product must come from TPP countries (TPP originating materials) and limits the amount of materials coming from countries outside TPP (non-originating materials).[370]

The quantitative analysis required to determine regional value content is an accounting exercise. In this exercise, elements such as the value of goods used in production, labor, overheads, and other costs are examined to determine if they meet a particular threshold percentage.[371] TPP regional value content comprises four separate methods, any one of which may be used in calculating a product's regional value content as long as it is one of the methods specified for a good of a particular tariff classification.[372] TPP article 3.5 contains the formulas for calculating the focused value method, the build-down method, the build-up method, and the net cost method.[373]

Someone who wants to use regional value content to qualify a product under the TPP rules of origin would determine which method of the methods allowable would be most beneficial.[374] A further description of each of the four formulas is useful here. The focused value method is a new method for calculating regional value content beyond the methods included in NAFTA.[375] The method is "focused" in that the calculation is based only on the value of the non-originating materials specified in the product specific rules of Annex 3-D.[376] The build-down method requires the regional value content to be calculated based on the value of all non-originating materials.[377] The build-down method is the one that Japan reportedly prefers.[378] One notices that both the focused value method and the build-down method require a calculation of the value of non-originating materials.[379] This calculation may be simpler than other calculations if the customs valuation of the imported materials is available; however, other costs associated with the imported materials, such as transportation, might also figure into the calculation.[380] The build-up method requires the regional value content to be calculated based on the value of originating materials.[381] The net cost method compares the net cost of the good, less the value of non-originating materials, as

369. *Id.*

370. TPP art. 3.11 does permit a *de minimis* inclusion of non-originating goods if not more than 10%. *See* Trans-Pacific Partnership Agreement, ch.3, art. 3.11.

371. *See U.S.-Korea Free Trade Agreement, Rules of Origin, A Regional Value Content Rule*, EXPORT.GOV, http://2016.export.gov/FTA/korea/eg_main_048793.asp (last visited Dec. 5, 2016) [hereinafter *U.S.-Korea Free Trade Agreement*].

372. Trans-Pacific Partnership Agreement, ch. 3, art. 3.5.

373. *Id.*

374. INT'L TRADE COMM'N, *supra* note 3, at 236–37.

375. Trans-Pacific Partnership Agreement, ch. 3, art. 3.5(a).

376. *Id.*

377. *Id.* art. 3.5(b).

378. TPP RULE OF ORIGIN IS 45%, *supra* note 37.

379. Trans-Pacific Partnership Agreement, ch. 3, art. 3.5(a), (b).

380. *See U.S.-Korea Free Trade Agreement*, *supra* note 371.

381. Trans-Pacific Partnership Agreement, ch. 3, art. 3.5(c).

compared to the net cost of the good.[382]

Appendix 1 to Annex 3-D adds another layer of complexity to the already complicated rules of origin for autos.[383] Appendix 1 is referenced in a footnote to the table included in the following section of this part.[384] Appendix 1 contains Tables A, B, and C.[385] Table A lists seven auto parts: two types of safety glass, two types of vehicle bodies, bumpers, door assemblies, and drive-axles.[386] Table B lists eleven processing operations: complex assembly, complex welding, die or other casting, extrusion, forging, heat treatment, laminating, machining, metal forming, molding, and stamping.[387] Table C lists certain key auto components.[388] The material and parts used in producing those key components are considered originating if they meet their own regional value content or are produced using at least one of the processes listed on Table B.[389] However, if a processing method from Table B is used in production, Table C specifies a maximum on the value of the materials and parts that can be deemed originating content under the value (build-up / build-down) or net cost methods of calculating regional value content.[390] Some of the auto parts and the applicable percentages shown on Table C include: engines (8407.33 and 8407.34)(10%); bumpers, brakes, and transmissions (10%); airbags and other vehicle parts (8707.99)(5%).[391]

H. An Example of Product-Specific Rules of Origin

The third category of rules of origin encompasses more and is much more detailed than one might initially anticipate. One way to gain some understanding of the complexity of product-specific rules of origin is to review portions of TPP that are closely connected to the auto and auto parts industries. A glance at selected portions of TPP Annex 3-D shows the following information:[392]

382. *Id.* art. 3.5(d).
383. INDUST. TRADE ADVISORY COMM., *supra* note 233, at 7.
384. *Infra* note 397 and accompanying text.
385. Trans-Pacific Partnership Agreement, Annex 3-D app. 1.
386. *Id.* at 2.
387. *Id.*
388. *Id.* at 2–3.
389. *Id.* at 1, ¶ 1.
390. *Id.* at 1, ¶¶ 2–3.
391. *See* Whitten, *supra* note 36 (discussing the application of this appendix to the manufacture of a car body from steel imported from China).
392. Trans-Pacific Partnership Annex 3-D, at 96-97, 154, 157–61.

HS Classification	Classified product	Product-Specific Rule of Origin
8407.33†[393]	Spark-ignition reciprocating piston engines of a kind used for the propulsion of vehicles of Chapter 87 : Of a cylinder capacity exceeding 250 cc but not exceeding 1,000 cc	No change in tariff classification required for a good of subheading 8407.33 through 8407.34, provided there is a regional value content of not less than: (a) 45 per cent under the build-up method; or (b) 45 per cent under the net cost method; or (c) 55 per cent under the build-down method.
8407.34†[394]	Spark-ignition reciprocating piston engines of a kind used for the propulsion of vehicles of Chapter 87 : Of a cylinder capacity exceeding 1,000 cc	See above
8544.30	Wire harnesses	A change to a good of subheading 8544.30 from any other subheading, except from heading 74.08, 74.13, 76.05, 76.14 or subheading 8544.11 through 8544.20 or 8544.42 through 8544.60; or No change in tariff classification required for a good of subheading 8544.30, provided there is a regional value content of not less than: (a) 35 per cent under the build-up method; or (b) 45 per cent under the build-down method; or (c) 60 per cent under the focused value method taking into account only the nonoriginating materials of heading 74.08, 74.13, 76.05, 76.14 and subheading 8544.11 through 8544.60.
870.02-87.95†	Cars	No change in tariff classification required for a good of heading 87.02 through 87.05, provided there is a regional value content of not less than: (a) 45 per cent under the net cost method; or (b) 55 per cent under the build-down method.

393. *Id.*
394. *Id.*

8707.10†[395]	Bodies for the motor vehicles of heading 8703	A change to a good of subheading 8708.10 through 8708.21 from any other subheading; or No change in tariff classification required for a good of subheading 8708.10 through 8708.21, provided there is a regional value content of not less than: (a) 45 per cent under the build-up method; or (b) 45 per cent under the net cost method; or (c) 55 per cent under the build-down method.
8708.70[396] [397]	Road wheels and parts	A change to a good of subheading 8708.70 from any other subheading; or No change in tariff classification required for a good of subheading 8708.70, provided there is a regional value content of not less than: (a) 35 per cent under the build-up method; or (b) 35 per cent under the net cost method; or (c) 45 per cent under the build-down method.

Review of the above information indicates that a finished car imported into Australia need only satisfy regional value content to receive a preferential tariff under TPP.[398] In contrast, all of the car components, except for piston engines, require either a tariff shift or regional value content.[399] The regional value content percentages also vary.[400] For vehicles, the minimum percentage is forty-five percent under the net cost method and fifty-five percent under the build-down method; for auto parts, there is a general range of minimum percentages from thirty-five percent to fifty-five percent and the regional value content calculation method that can be applied.[401]

From review of the above table, one notices that the product-specific rule of origin for wire harnesses is particularly lengthy.[402] If tariff shift is used, certain

395. *Id.*

396. *Id.*

397. *See* also Appendix 1 (Provisions Related to the Product-Specific Rules of Origin for Certain Vehicles and Parts of Vehicles).

398. The portion of the table above containing information on Harmonized System heading 87.02-87.05 (passenger vehicles).

399. The portion of the table above containing information on Harmonized System subheading 8544.30 (wire harnesses); heading 8703; subheadings 8708.29 (vehicle body parts); 8708.30 (brakes and parts); 8708.40 (transmissions); 8708.70 (road wheels and parts); 8708.94 (steering wheels); airbags (8708.95); 8708.99 (miscellaneous motor vehicle parts).

400. Portions of the table above.

401. *Id.*

402. The portion of the table above containing information on Harmonized System subheading 8544.30 (wire harnesses).

tariff code headings and subheadings are excluded from the calculation;[403] those same tariff code headings and subheadings are required to be taken into account when using the regional value content focused value method.[404] The specifically-referenced tariff code headings and sub-headings include insulated and non-insulated wire.[405] For the product-specific rules of origin for wire harnesses in the above table, three regional value content methods are used, but the net cost method is not one of them.[406] In the above table, wire harnesses are the only parts that include the focused value method in the product-specific rule of origin and the sixty percent content requirement is higher than the content for any other good included in the table.[407] The high originating content requirement under the focused value method probably is a result of some concern that wire harnesses may be an auto component likely to be assembled in a non-TPP country.[408] The sixty percent requirement would permit assembly in a non-TPP country but using a high content of materials produced in TPP countries.[409]

The wire harness is a critical car component that requires some portion of the assembly to be done by hand.[410] An automotive car harness is a collection of wires bundled together that provide electricity and signals to various areas of the car.[411] The bundling of the wires using some type of sleeve, tape, or other restraint into a one-piece component has the advantages of being more compact, increasing the ability to safeguard the electrical system from damage due to vibration, moisture, or abrasion, decreasing the possibility of a short, decreasing the possibility of fire through the use of a flame-retardant sleeve, and decreasing the time needed to wire the car.[412] After production, the wire harness must be tested to ascertain that it is functioning correctly.[413] Although part of the wire harness manufacturing process can be automated, such as cutting the wires, other portions of the process must be done by hand.[414] A wire harness supplier may have the component manufactured in

403. *Id.*

404. *Id.*

405. Trans-Pacific Partnership Annex 3-D, at 81–82, 84, 152–55.

406. The portion of the table above containing information on Harmonized System subheading 8544.30 (wire harnesses).

407. *Id.*

408. *See* CARLOS AYALA, AUTOMOTIVE WIRING HARNESS: MANUFACTURING PROCESS (1999), http://www.personal.engin.umd.umich.edu/~jwvm/ece539/W99Presentations/Wiring_Harn/AutoHarness.PDF.

409. The portion of the table above containing information on Harmonized System subheading 8544.30 (wire harnesses).

410. AYALA, *supra* note 408, at 1, 8.

411. *Id.* at 1.

412. Masakazu Kobayashi, Yoshiya Hirano & Masatake Higashi, *Optimization of Assembly Processes of an Automobile Wire Harness*, 11 COMPUTER-AIDED DESIGN & APPLICATIONS 305, 305 (2013); Robert Kraus & David Ryan, Advances in Heat-Shrink Technology, 4 IEEE ELECTRICAL INSULATION MAG. 31, 33 (1988); Austin Weber, *A Little Covering Goes a Long Way*, WIRE PROCESSING 12 (Oct. 2016).

413. AYALA, *supra* note 408, at 11–12.

414. *Id.* at 8, 11–12.

a location with low labor cost to cut down on its cost of manufacture.[415]

I. Differences Between NAFTA and TPP Rules of Origin

Those familiar with NAFTA rules of origin would note the major differences between NAFTA and TPP rules of origin when determining regional value content. One difference is that TPP no longer requires tracing of certain non-originating components.[416] Pursuant to the tracing rule, the non-originating status of certain goods was determined at the time a NAFTA party took title.[417] From then on, those goods had to be traced and they maintained their status as non-originating goods throughout the balance of the production process.[418] The reason for the tracing rule was to combat the "roll-up" problem. Roll-up occurs when an auto part contains some non-originating content but the part is deemed to be originating under the rules of origin.[419] This status of being 100% an originating good continues when the auto part is incorporated into the finished car.[420] Thus the roll-up may give an inaccurate picture of the percentage of the car that was produced with materials originating in countries within the trade agreement.[421] The auto industry had lobbied for the tracing rule but no longer supports the rule because of the administrative burden.[422]

Another difference between NAFTA and TPP is between applicable percentages when using regional value content.[423] For example, NAFTA requires 62.5% originating materials for cars and many parts under the net cost method to qualify for preferential tariffs.[424] Under TPP, the percentage drops to 45% under the net cost method for cars.[425] For some auto parts, TPP lowers the threshold percentage to 35% under the net cost method. TPP includes the use of a build-down method that is unavailable under NAFTA.[426] The threshold minimum of originating material is 55% for cars under the build-down method.[427] The build-down method can be used for auto parts, including motor vehicle bodies, road wheels, radiators, mufflers, exhaust pipes, and clutches, and the threshold minimum of originating material for those auto parts is 45%.[428] The build-up method can also be used for those same parts, with a threshold minimum of

415. *Id.*
416. INTERN'L TRADE COMM'N, *supra* note 3, at 236–37.
417. North American Free Trade Agreement, Dec. 17, 1992, art. 403.1.16, H.R. Doc. 103-159, 32 I.L.M. 289, 673 (entered into force Jan. 1, 1994).
418. North American Free Trade Agreement, Dec. 17, 1992, Annex 403.1, 403.2, H.R. Doc. 103-159, 32 I.L.M. 289, 673 (entered into force Jan. 1, 1994).
419. SCHEWEL, *supra* note 263.
420. *Id.*
421. *Id.*
422. *Id.*
423. INTERN'L TRADE COMM'N, *supra* note 3, at 237.
424. WU, *supra* note 36, at 2.
425. *Id.*
426. *Id.*
427. *Id.*
428. *Id.* at 2 n.3.

originating material of 35%.[429]

The lower percentages lead most analysts to the conclusion that the threshold percentages are lower under TPP than under NAFTA.[430] Japan negotiated for low threshold minimum percentages for originating materials to accommodate the country's present practice of outsourcing parts from non-TPP countries, including China.[431] The percentage figures contained in TPP for auto goods were a compromise between Japan and other TPP parties,[432] as some representing Canadian and Mexican interests had advocated for a minimum fifty percent originating materials percentage on all auto parts.[433]

The beneficiaries of the lower minimum percentages of originating materials included in TPP depend on several factors. As far as a United States auto company is concerned, the lower percentages may give an automaker the ability to outsource auto components from a non-TPP country to save on costs yet still take advantage of the TPP preferential tariffs.[434] This may mean that a United States third-tier producer of auto components may face more competition in cost, especially if the product is a simple one like tires or steel.[435] Producers of complex auto components or those for which the auto component producer needs to be geographically close to a higher tier part supplier or automaker likely will be unaffected.[436] A company with a global footprint may decide to shift some of its operations to less costly geographical locations; however, a company with a more local focus may not have that option.[437]

IV. ANALYSIS OF THE EFFECT OF TPP

A. Geopolitics

Some political scientists employ game theory in analyzing the strategy of what a country will do in relationship with what the country thinks other countries will do.[438] One theory is that the signing of one free trade agreement may have a contagion effect leading non-parties to the agreement to sign their own trade agreement for fear of being left out of the gains the parties to the first trade agreement, or losing existing markets,[439] with "the degree of contagion . . . related to the importance of the partners' markets."[440] Another motivation may be for a

429. *Id.*
430. *Id.* at 2.
431. *Id.*
432. *Id.*
433. TPP RULE OF ORIGIN IS 45%, *supra* note 38.
434. WU, *supra* note 36, at 2.
435. SCHEWEL, *supra* note 263.
436. WU, *supra* note 64, at 2–3.
437. TPP RULE OF ORIGIN IS 45%, *supra* note 37.
438. Emilie M. Hafner-Burton, Brad L. LeVeck, David G. Victor, & James H. Fowler, *Decision Maker Preferences for International Legal Cooperation*, 68 INT'L ORG. 845, 852 (2014).
439. Richard Baldwin & Dany Jaimovich, *Are Free Trade Agreements contagious?*, 88 J. INT'L ECON. 1, 1 (2012).
440. *Id.* at 21.

country to be in the position to better compete for future foreign direct investment anticipated to be made in support of the global supply chain for the auto and auto parts industries.[441] Although many think that the choice of partners is dependent on trade, the choice is dependent more on power and politics.[442] Economic interdependence seems to have a positive effect in deterring conflict and promoting peace and security.[443]

TPP is the lead mega-regional[444] in a region that has spawned a number of concepts in the past for Asian regional integration.[445] The primary Asian regional association has been the Association of Southeast Asian Nations ("ASEAN"), with its original five members, Indonesia, Malaysia, the Philippines, Singapore and Thailand, and the addition of Brunei, plus the later addition of four more countries, Cambodia, Laos, Myanmar and Vietnam, bringing the total countries in ASEAN to ten.[446] In turn, China has been pressing forward with the Regional Comprehensive Economic Partnership, comprised of ASEAN+6 (the ASEAN countries plus Australia, China, India, Japan, Korea, and New Zealand).[447]

The TPP itself was an outgrowth of the P4 (Brunei, Chile, New Zealand and Singapore).[448] When the United States expressed its interest in joining, Australia, Malaysia, Peru, and Vietnam followed shortly thereafter.[449] Vietnam has high tariffs; as a developing country it saw that it could benefit from joining the others[450] and Malaysia did not want to be left out.[451] Canada and Mexico had to join to be covered on the new measures under TPP that are not covered under NAFTA.[452] Japan had to join; it could not afford to have the United States get a better deal with the other TPP parties than Japan.[453]

Game theory should trigger an examination of the existing trade agreements between TPP parties and what TPP parties stand to lose if TPP does not go into

441. *Id.* at 11.

442. Emilie M. Hafner-Burton, David G. Victor & Yonatan Lupu, *Political Science Research on International Law: The State of the Field*, 106 AM. J. INT'L L. 47, 51-52 (2012).

443. Emilie M. Hafner-Burton & Alexander H. Montgomery, *War, Trade, and Distrust: Why Trade Agreements Don't Always Keep the Peace*, 29 CONFLICT MGMT. & PEACE SCI. 257, 258 (2012).

444. For background on the TPP, *see* Chunding Li & John Whalley, *China and the Trans-Pacific Partnership: A Numerical Simulation Assessment of the Effects Involved*, 37 WORLD ECON. 169, 170–73 (2014).

445. Meredith Kolsky Lewis, *The TPP and the RCEP (ASEAN+6) as Potential Paths toward Deeper Asian Economic Integration*, 8 ASIAN J. OF WTO & INT'L HEALTH L. & POL'Y 359, 361 (2013).

446. *Id.* at n.1, 3.

447. *Id.* at 361–62.

448. *Id.* at 364; Meredith Kolsky Lewis, *Expanding the P-4 Trade Agreement into a Broader Trans-Pacific Partnership: Implications, Risks and Opportunities*, 4 ASIAN J. OF WTO & INT'L HEALTH L. & POL'Y 401, 403 (2009).

449. Lewis, *supra* note 448, at 403.

450. Raj Bhala, *Trans-Pacific Partnership or Trampling Poor Partners? A Tentative Critical Review*, 1 MANCHESTER J. INT'L ECON. L. 2, 19 (2014).

451. CERDEIRO, *supra* note 17, at 13, 17, 23.

452. *Id.* at 7.

453. *Id.* at 8–9.

effect. Three trade agreements overlap in the Pacific Ocean area of the globe. The three are TPP, NAFTA, and the ASEAN Trade in Goods Agreement.[454] The three NAFTA countries, the United States, Canada, and Mexico, are also parties to TPP.[455] Of the ten members of ASEAN, only four, Brunei, Malaysia, Singapore, and Vietnam, are parties to TPP.[456] The six ASEAN members who are not parties to TPP are Cambodia, Indonesia, Laos, Myanmar, the Philippines, and Thailand.[457] As far as ASEAN countries with auto industries, only two, Malaysia and Vietnam, are parties to TPP; three other ASEAN members with auto industries, Indonesia, the Philippines, and Thailand, are not parties to TPP.[458] The auto industries of Malaysia and Vietnam may receive a boost above the auto industries of Indonesia, the Philippines, and Thailand because the latter three countries will not receive the benefits that TPP has to offer. With TPP, the huge United States consumer base would become more attractive to Brunei, Japan, Malaysia, Singapore, and Vietnam.[459] Chances are that those five countries will export more products to satisfy the demands of consumers in the United States, as these are the only countries with which the United States does not currently have a preferential trade agreement in effect.[460]

As far as Latin America is concerned, the United States already has trade agreements with Chile, Mexico, and Peru.[461] TPP will strengthen the ties between the United States and those countries and will update NAFTA.[462] One study considered the effect of non-TPP Latin American countries joining TPP.[463] The conclusion of the study was that the countries that could see positive results by becoming TPP members are Brazil, Guatemala, Nicaragua and Colombia because of their current restrictiveness in trade in goods; Argentina and El Salvador are the countries that would show little effect.[464]

B. Economics and TPP

The United States International Trade Commission (ITC) released its analysis of TPP in May of 2016 and projected positive effects over baseline projections, although representing a small percentage in comparison with the large size of the United States economy.[465] The analysis showed that by 2032, the United States

454. INTERN'L TRADE COMM'N, *supra* note 3, at 695–740.

455. *Id.* at 703.

456. *Id.* at 410 n.28.

457. *Id.* at 19; Lewis, *supra* note 448, at 410 n.28.

458. HIDEO KOBAYASHI, CURRENT STATE AND ISSUES OF THE AUTOMOBILE AND AUTO PARTS INDUSTRIES IN ASEAN 1 (2015), http://www.eria.org/ERIA-DP-2015-22.pdf.

459. GOTO, *supra* note 16.

460. *Id.*

461. CHRISTOPHER WILSON, THE IMPACT OF TPP ON LATIN AMERICA AND U.S. RELATIONS WITH THE REGION (2015), https://www.wilsoncenter.org/article/the-impact-tpp-latin-america-and-us-relations-the-region.

462. *Id.*

463. *See* CERDEIRO, *supra* note 17.

464. *Id.* at 21.

465. INTERN'L TRADE COMM'N, *supra* note 3, at 21.

will show a $57.3 billion USD increase in annual income (0.23 percent), a $42.7 billion USD increase in gross domestic product (0.15), and an increase in employment (0.07 percent).[466] United States exports and imports would rise ($27.2 billion USD or 1.0 percent for exports and $48.9 billion USD or 1.1 percent for imports).[467] The analysis considered the effect on United States exports to and imports from TPP countries that are new partners to free trade agreements with the United States.[468] The estimates were that United States exports would show an increase of $34.6 billion USD, or 18.7 percent, and United States imports would show an increase of $23.4 billion USD, or 10.4 percent.[469]

The ITC May 2016 report contained an economic assessment of the United States auto industry.[470] The overview of the auto industry was positive with growth in imports and exports of United States finished vehicles and vehicle parts.[471] For 2032, the report showed a growth of $1.6 billion USD, or 0.3 percent, in finished cars but a decrease in auto parts of $1.4 billion USD, or 0.3 percent.[472] The increase in exports is primarily based on exports to Japan and Vietnam. Japan would contribute to the increase in car imports due to the reduction in United States tariffs.[473] Imports of vehicles and parts from Canada and Mexico are also projected to increase.[474] The TPP rules of origin for autos are expected to impact the United States auto and auto parts industries.[475] The study concludes that the lowering of the regional value content under TPP as compared to NAFTA will contribute to a rise in the exports of United States autos but a decline in exports of United States auto parts to Canada and Mexico.[476] Auto industry experts see the regional value content percentages as sufficiently differentiating between carmakers in TPP and non-TPP countries to lower the likelihood of carmakers in non-TPP countries from taking advantage of the treaty.[477] However, there is a perception that the rules of origin that impact auto parts may not be sufficiently strong to protect auto parts suppliers in TPP countries.[478]

Another recent economic analysis conducted in Spring of 2016 from the Peterson Institute for International Economics (Peterson) projects that TPP will result in benefits, although more significant than those projected by the International Trade Commission.[479] This second analysis predicts that by 2030, the

466. *Id.*
467. *Id.*
468. *Id.*
469. *Id.*
470. *Id.* at 31–32, 232–54.
471. *Id.* at 31, 232.
472. *Id.* at 31.
473. *Id.*
474. *Id.* at 31, 232–36.
475. *Id.* at 31.
476. *Id.* at 31, 236–38.
477. INDUST. TRADE ADVISORY COMM., *supra* note 233, at 6.
478. *Id.* at 6–7.
479. PETER A. PETRI & MICHAEL G. PLUMMER, ECONOMICS OF THE TRANS-PACIFIC PARTNERSHIP: DISTRIBUTIONAL IMPACT (2016), https://piie.com/commentary/op-eds/economics-trans-

incomes of TPP countries will show a $465 billion USD annual increase (1.1 percent) and the exports of TPP countries will show a $1,025 billion USD annual increase (11.5 percent).[480] The United States economy is projected to have a $131 billion USD boost, in part based on a 9.1 percent increase in exports.[481] Although the United States is ahead of all TPP countries in the dollar figure gain, Vietnam is projected to have the largest percentage increase in real income, at 9.1 percent.[482] Other substantial beneficiaries are Japan, Malaysia, and Canada. Trade diversion is projected to have a slightly negative effect on China.[483]

The projected economic benefits may be different for different economic groups in the United States. For example, two economists analyzed the effects of trade on the United States economy for the twenty-year period from 1988 to 2008.[484] They found that there was a $720 billion USD benefit due to increased trade but that competition from imports suppressed wages by $140 billion USD.[485] Although the overall effect was positive, the top twenty percent of United States households received three-quarters of this gain.[486] Two other economists analyzed who are the winners and losers from the effects of trade.[487] They found a "pro-poor bias of trade."[488] What that means is that the poorest would lose sixty-three percent of their purchasing power if the country was closed off from international trade but, in contrast, the high-income individuals would lose twenty-eight percent.[489] The reason for this is that the poorest spend more on goods that are more traded and the wealthy spend a larger portion of disposable income on services, which are not so heavily traded.[490] The Peterson Spring 2016 report supports the pro-poor bias of trade.[491] Although a common belief is that TPP will benefit the wealthy, the recent analysis projected that TPP will slightly benefit the middle and lower classes more than the upper class and will have a substantial beneficial effect on the poorer developing countries.[492]

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pacific-partnership-distributional-impact.

480. *Id.*; *see also* Peter A. Petri & Michael G. Plummer, *The Economic Effects of the Trans-Pacific Partnership: New Estimates*, *in* PETERSON INSTITUTE FOR INTERNATIONAL ECONOMICS, ASSESSING THE TRANS-PACIFIC PARTNERSHIP; VOLUME 1: MARKET ACCESS AND SECTORAL ISSUES (Cathleen Cimino-Isaacs & Jeffrey J. Schott eds., 2016), https://piie.com/system/files/documents/piieb16-1.pdf.

481. PETRI & PLUMMER, *supra* note 479.

482. *Id.*

483. *Id.*

484. Gary Clyde Hufbauer & Tyler Moran, *Does Foreign Trade and Investment Reduce Average US Wages and Increase Inequality? (Part 2)*, TRADE & INV. POL'Y WATCH (Nov. 10, 2015), https://piie.com/blogs/trade-investment-policy-watch/does-foreign-trade-and-investment-reduce-average-us-wages-and.

485. *Id.*

486. *Id.*

487. *Id.*

488. Pablo D. Fajgelbaum & Amit K. Khandelwal, MEASURING THE UNEQUAL GAINS FROM TRADE 3 (2014), http://www.nber.org/papers/w20331.

489. *Id.*

490. *Id.*

491. PETRI & PLUMMER , *supra* note 479.

492. *Id.*

Vietnam's inclusion in TPP may have an interesting effect on the United States and on China. Vietnam's labor costs are twenty percent lower than labor costs in China and the Vietnamese population is becoming increasingly well-educated.[493] Vietnam is reportedly encouraging domestic firms to develop by protecting them from competition from China.[494] Vietnam may be able to improve economic efficiency by permitting presently state-owned enterprises to pass into private hands. The dynamism of the Vietnamese economy may be enhanced if it receives foreign direct investment.[495] In 2014, the United States collected $5.53 billion USD in tariff duties.[496] Because Vietnam had no free trade agreement with the United States, Vietnam paid 42.9 percent of that amount.[497] TPP will benefit Vietnam by significantly reducing the tariffs that Vietnam pays to the United States. One estimate is that the reduction in tariffs results in an 8.1 percent increase in the gross domestic product of Vietnam by the year 2030.[498] Vietnam's inclusion in TPP may result in Vietnam taking over some trade with the United States that would otherwise go to China.[499] For China, this may result in a zero to 0.1 percent decline in China's gross domestic product.[500]

Economists have been very interested in studying the potential effects of the various regional trade agreements.[501] China has become a big player in world trade with exports fueling its economy.[502] The volume of China's exports has made some countries leery of China because of China's imports competing strongly with domestic production.[503] Some have talked about China either joining TPP at some point or becoming an associate member of TPP.[504] One econometric study examined the effects of China being or not being a participant in TPP.[505] The study estimates that China not being a participant in TPP would raise outside demand, resulting in a growth of the exports and total production of the country, but that China would decrease imports.[506] In econometric terms, this would be a "welfare loss,"[507] but a relatively small one, for China because of the combination of the

493. Andrew Collier, *China Eyes Vietnam and the TPP Warily: Vietnam's economic growth, coupled with TPP, could spell trouble for Chinese companies*, DIPLOMAT (May 14, 2016), http://thediplomat.com/2016/05/china-eyes-vietnam-and-the-tpp-warily/.

494. *Id.*

495. *Id.*

496. *Id.*

497. *Id.*

498. *Id.*

499. *Id.*

500. *Id. See also* Rahel Aichele & Gabriel Felbermayr, *The Trans-Pacific Partnership Deal (TPP): What Are the Economic Consequences for In- and Outsiders?*, 16 CESIFO F. 53, 59 (2016), http://www.cesifo-group.de/portal/page/portal/DocB . . . pacific-december.pdf.

501. Chunding Li & John Whalley, *China's potential future growth and gains from trade policy bargaining: Some numerical simulation results*, 37 ECON. MODELLING 65, 65–66 (2014).

502. *Id.* at 65.

503. *Id.*

504. Li & Whalley, *supra* note 444, at 169.

505. *Id.*

506. *Id.* at 170.

507. *Id.*

growth in China's exports and the decline in China's imports. The situation would change if China were to be a participant in TPP. The effect for China as a participant would be significantly positive.[508]

V. CONCLUSION

The TPP is a trade agreement with important geopolitical, strategic dimensions.[509] The United States continues as the market hegemon in trade.[510] The TPP is attractive to the United States because it promotes the United States integration into the Asian region, which holds a large portion of the world's population and has shown itself to be a region of dynamic economic growth.[511] The United States can better protect the investment interests of multi-national enterprises headquartered in the United States by having a stronger presence in Asia. If Congress were not to ratify the TPP, that action could very well signal a protectionist trend and isolate the United States from being a full participant in global trade.[512]

The United States needs to show its continuance as a world power in the region and might provide needed stability in Asia during a time that Asia is encountering substantial political, economic, and institutional changes.[513] With the United States solidifying the Asian American block, the world could be dominated by two blocks – Asian America on one side of the globe and Europe on the other.[514] The United States needs to become a party to a regional club that includes Asia during the time that other trade agreements are being negotiated.[515] The downside of TPP not being successful is that the United States may be foreclosing itself from participation in other clubs that might come into being in Asia.[516]

When considering the auto industry, TPP may have an overall beneficial effect on the consumer by lowering prices or keeping prices fairly constant even with rising prices of raw materials and increased safety and gas conservation requirements; TPP may have a negative effect in certain areas of the country that lose business because an automaker moves a portion of the manufacturing chain to another TPP country from the United States. Yet, a multinational enterprise, like a major automaker, may benefit from lower costs of auto components and the opening of new markets from the decrease in tariffs. A politician knows that a small number of people a trade measure affects to a greater extent, such as those in the auto component portion of the industry losing business, are more politically effective than a large number of people, such as auto consumers, all affected by a

508. *Id.*

509. Lewis, *supra* note 46, at 37; Bhala, *supra* note 450, at 2.

510. Emilie M. Hafner-Burton & Alexander H. Montgomery, *The Hegemon's Purse: No Economic Peace Between Democracies*, 45 J. PEACE RES. 111, 112 (2008).

511. Lewis, *supra* note 46, at 38–39.

512. GOTO, *supra* note 16.

513. Lewis, *supra* note 448, at 371; Bhala, *supra* note 450, at 20.

514. Lewis, *supra* note 448, at 412.

515. Lewis, *supra* note 46, at 51.

516. GOTO, *supra* note 16.

smaller amount. The political effectiveness of the smaller group is based on the fact that those who will lose from the TPP rules of origin for autos will be more vocal in their objections and are likely to lobby their representatives in Congress. Another factor is that the vast, but individually small, gains to consumers are transparent in that consumers typically do not realize that they are benefiting from a trade agreement in being able to take advantage of lower prices.

An econometric study published in 2014 analyzed the club goods effect of TPP. The study found that the TPP mostly has a positive effect on the members of the TPP club, although global free trade has a positive effect on nearly all countries, with the global free trade benefits considerably exceeding the benefits of the free trade effects of TPP.[517] TPP will increase the production, exports, and imports of all club members, with the largest gains received by the smaller countries.[518] For most of the non-club members, exports are estimated to increase and imports to decrease, with a decrease in welfare.[519] The 2014 study is consistent with the ITC and Peterson econometric analyses from the spring of 2016 as far as overall benefits are concerned and with the effect on non-club members. A word of caution is advisable concerning the effect on the suppliers of less complex auto parts. Those suppliers run the risk of stiff competition from other TPP members with lower labor costs.

Therefore, the conclusion is that the TPP will have an overall positive effect on the auto and suppliers of more sophisticated auto parts of the TPP parties. However, TPP may not have such a positive effect on the suppliers of the less complex auto parts. The effect of TPP will likely be slightly negative as far as China's auto and auto parts industries are concerned.

517. Li & Whalley, *supra* note 444, at 170.
518. *Id.* at 182.
519. *Id.* at 182.