

NAFTA REFORM MUST BETTER PROTECT INTELLECTUAL PROPERTY

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As the Trump administration seeks to renegotiate the North American Free Trade Agreement with Canada and Mexico, a key issue for U.S. trade negotiators is better and more enforceable protections of intellectual property (IP) rights. This must include more legally binding protections of patents, copyrights, trademarks, trade secrets, and other engines of invention and creation, which face a growing array of threats in foreign markets, including even our closest North American trade partners.

While NAFTA has clearly been a net plus to the economies of Mexico, Canada and the U.S., inadequate protections of IP cost American companies – producers of drugs, vaccines, computer software, movies and music, manufacturing designs, and so on – tens of billions of dollars a year. This reduces the value of these companies, thus hurting American workers, consumers, and shareholders.

The International Chamber of Commerce and International Trademark Association estimates the total value of the global trade in pirated and counterfeit goods as high as \$1.7 trillion in 2016.¹ Pirating, counterfeiting and ignoring patent protections is a growing problem in trade and for leading American innovators in advanced manufacturing, pharmaceuticals, software, music, and video.

Some of NAFTA's IP provisions are out-of-date and ripe for reform, while others are technically adequate but under-enforced, or simply ignored. In all cases, American companies are losing out in profits and competitiveness because of a general failure to recognize the value of IP and safeguarding these assets, which are increasingly the high value-added products of the U.S. and global economies.

NAFTA renegotiation offers an invaluable opportunity to set precedent and correct for these inadequate safeguards of IP. This is especially important because getting it right under NAFTA should become a model for all future trade deals and treaties for years to come.

BENEFITS OF NAFTA AND TRADE

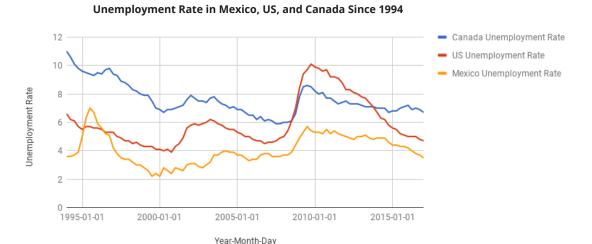
NAFTA, which was Ronald Reagan's vision in the 1980s and negotiated into law with bipartisan support during the Clinton administration, has been on balance a big positive for the economies of the three participants. Some believe that NAFTA has benefitted Canada and especially Mexico at a cost to the United States in terms of lost domestic businesses and the exporting of American jobs.

While some industries, like textiles and autos, have been adversely affected, the trade deal has created far more jobs than have been surrendered. For example, the Peterson Institute for International Economics has found that today there are 14 million U.S. jobs that are reliant on NAFTA, and about 200,000 export related jobs make about 15%-20% more as a result of the agreement.² The study also finds: "For every net job lost, the gains to the U.S. economy were about \$450,000, owing to enhanced productivity of the workforce, a broader range of goods and services, and lower prices at the checkout counter for households."

² https://piie.com/blogs/trade-investment-policy-watch/nafta-rejoinder-us-effects-are-clearly-positive-most-workers



http://www.theglobalipcenter.com/wp-content/themes/gipc/map-index/assets/pdf/2016/GlobalCounterfeiting_Report.pdf



A Wharton-University of Pennsylvania study estimates an even bigger impact. It finds that six million American jobs depend directly on U.S. trade with Mexico.³ Overall trade between the U.S., Canada, and Mexico has increased from \$290 billion in 1993 to \$1.1 trillion in 2016. This has also made American firms more productive and competitive in global markets. Wharton finds that, "twenty-five cents out of every dollar of goods that are imported from Canada to the U.S. is actually 'Made in USA' content, as are 40 cents out of every dollar for goods imported into the U.S. from Mexico."

Even the common argument that NAFTA disproportionately benefits Mexico is exaggerated. While it is true that the U.S. trade deficit with Mexico has widened over the past two decades, that trade deficit is minor compared to the overall trade volume, which has now reached over \$500 billion between the two nations. Between 1993 and 2015, America's real per-capita gross domestic product (GDP) grew 39.3% to \$51,638.4 Canada's grew at about the same pace or 40.3% to \$50,001, and Mexico's grew 24.1% to \$9,511. So it is hard to say that all of the gains from NAFTA have gone to Mexico.

Yes, there have been winners and losers. NAFTA's implementation took place as manufacturing employment was continuing its decades-long decline. Manufacturing jobs have fallen, from 17.7 million jobs at the end of 1993 to 12.3 million at the end of 2016, but most of this was attributable to technology and productivity enhancements.⁵ Auto jobs are down about 27 percent. But winners include American farmers, service workers, technology and business professionals. U.S. farm exports to Canada and Mexico grew 156% (farm exports to Mexico and Canada were greater than exports to the next six largest markets combined),⁶ and U.S. service exports to Mexico and Canada increased from \$25 billion in 1993 to \$88.6 billion.

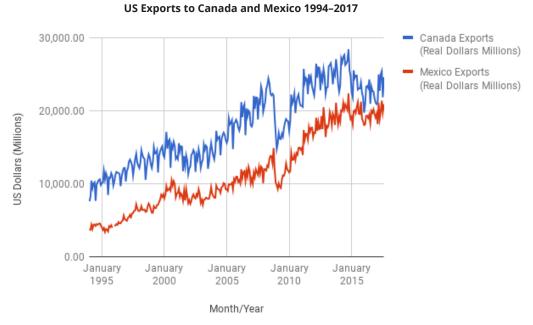
⁶ https://ustr.gov/archive/assets/Trade_Agreements/Regional/NAFTA/Fact_Sheets/asset_upload_file496_13496.pdf



³ http://knowledge.wharton.upenn.edu/article/naftas-impact-u-s-economy-facts/

⁴ https://data.worldbank.org/indicator/NY.GDP.PCAP.CD

⁵ https://data.bls.gov/timeseries/CES3000000001



In sum, American growth is highly dependent on a successful renegotiation of NAFTA that retains the spirit and trilateral benefits of the trade deal, but also corrects some of its deficiencies. This includes safeguarding the interests of American companies with more vigilant protections of property IP rights and patents.

IP: A GROWING COMPONENT OF THE U.S. ECONOMY AND JOBS

IP is defined as inventions; techniques, designs, literary and artistic works; and symbols, names and images used in commerce.⁷ Such "creations of the mind" are legally protected under patents, copyrights, and trademarks. These protections of private property are as fundamental to a free enterprise system as legal rights to land and other physical property. Without such protections creativity and invention – two engines of economic progress – would be discouraged, diminished and delayed.

The central and expanding role of IP in the modern global economy is reflected in a few dramatic figures. For example, out of a total value of \$17 trillion for all the companies on the S&P 500 in 2014, around \$11 trillion was in the form of intangible assets including IP, and the estimated global value is around twice that.⁸

Furthermore, IP plays an important economic role enabling the burgeoning global trade in commercial services. IP charges making up 8.9% of service exports by developed economies.⁹ The dark side of the IP economy, in the form of theft, expropriation, and black marketeering, is almost as vast: the International Chamber of Commerce and International Trademark Association predict the total value of the global trade in pirated and counterfeit goods will rise from \$1.7 trillion in 2016 to \$2 trillion by 2022.¹⁰

http://www.inta.org/Communications/Documents/2017_Frontier_Report.pdf



http://www.wipo.int/about-ip/en/

^{*} https://fm.cnbc.com/applications/cnbc.com/resources/editorialfiles/2016/10/21/20161102-CNBC%20White%20Paper%20Innovation%20Alpha%20Explained%20Post%20Launch%2011.2.16.pdf

https://www.wto.org/english/res_e/statis_e/wts2016_e/wts2016_e.pdf

IP's specific contribution to the American economy can be conveyed, in part, by simple headcount: IP-intensive industries support 27.9 million jobs directly, and 17.6 million more through supply chains, for a total 45.5 million jobs, or 30% of all U.S. employment.¹¹ Wages for employees in IP-intensive industries are 50% higher than other categories, and their productivity advantage is even more marked, with an average output of \$250,000 per employee in IP-intensive industries compared to \$130,000 for others.

Even this understates IP's strategic importance as a long-term driver of growth, reflecting its position astride the "commanding heights" of the information economy. From 2010 to 2014, the economic contribution of IP-intensive industries to the U.S. economy in terms of value added jumped from \$5.06 trillion to \$6.6 trillion per year, increasing in proportional terms from 34.8% to 38.2% of GDP. ¹² Between 2008 and 2015, the average annual output for IP-intensive manufacturing industries was \$585,391 per employee, 38% higher than that of non-IP intensive industries. ¹³ Importantly, IP-intensive employers are more resilient than other categories when adverse economic conditions reign: during the Great Recession IP-intensive companies cut fewer positions than their peers in non-IP intensive industries in proportional terms, and during the subsequent recovery they added more jobs. ¹⁴

Any economic strategy aiming to boost exports must include a full-court press on IP-related goods: U.S. exports of merchandise by IP-intensive manufacturing industries increased 8.6% from 2010-2014, and there is every reason to expect this trend to continue if IP is made a top priority.¹⁵ IP-intensive industries also contribute a disproportionate share of exports, averaging \$130,000 per employee compared to \$40,000 for other industries, reflecting the high degree of value added.¹⁶

KEY AREAS FOR NAFTA REFORM

As time goes on, prosperity will become ever more intertwined with the ability to produce and control IP, which in turn depends on a robust defense of the rights of American companies abroad. The U.S. has a strong national interest in better IP protections due to its large share of the global IP economy, with American companies accounting for 39% of all direct IP revenues in 2013.¹⁷ Unsurprisingly, American companies are also the most popular targets for IP infringement, with IP theft costing American consumers and businesses \$300 billion annually.¹⁸

NAFTA encapsulates many of the dynamics, both positive and negative, that have shaped the broader world economy since its implementation in 1994, including the fast-growing role of IP – but also the perils of unchecked infringement. In the same way, the current renegotiation offers a unique opportunity to put America's trade relations with the rest of the world on a firm footing from the beginning. U.S. trade negotiators would be wise to push hard and get it right the first time.

A more informed, aggressive strategy to protect American IP rights in foreign markets can play a major part in growing exports and thus reducing America's trade deficit with the rest of the world, beginning with its NAFTA partners. A few key categories can serve as guideposts showing the way to a 21st century trade agreement for IP, recognizing and protecting America's national interests and those of its trade partners.

http://www.ipcommission.org/report/ip_commission_report_052213.pdf



http://www.ndpanalytics.com/ip-intensive-manufacturing-industries-driving-us-economic-growth-2015/

https://www.uspto.gov/sites/default/files/documents/IPandtheUSEconomySept2016.pdf

http://www.ndpanalytics.com/report-ipintensive-industries-drive-economic-growth-2017

http://www.ndpanalytics.com/ip-intensive-manufacturing-industries-driving-us-economic-growth-2015/

https://www.uspto.gov/sites/default/files/documents/IPandtheUSEconomySept2016.pdf

http://www.ndpanalytics.com/ip-intensive-manufacturing-industries-driving-us-economic-growth-2015/

http://www.progressive-economy.org/trade_facts/u-s-share-of-world-intellectual-property-revenue-39-percent/

PHARMACEUTICALS

Pharmaceuticals are among the top exporting sectors of IP-intensive industries, with global sales of \$47 billion in 2015.19 Within NAFTA, America exported \$3.9 billion of pharmaceuticals to Canada in 2016 and \$1.4 billion to Mexico in 2015; however, both countries have a number of unresolved IP issues that threaten this trade, spanning manufacturing, licensing, and regulation.

One area in need of reform is protection for the comprehensive package of data pharmaceutical companies must submit to national regulatory authorities to receive marketing approval. Mexico belatedly took steps to provide regulatory data protection for pharmaceuticals in 2012, but this decision was purely bureaucratic, with no accompanying national legislation, meaning Mexico can reverse the protections at any time. In practice, pharmaceutical innovators must go to court to safeguard their information.

Making matters worse, Mexico has also refused to provide regulatory data protection for drugs belonging to the new generation of "biologic" compounds as new chemical entities, again leaving pharmaceutical exporters vulnerable to knockoffs and imperiling investment in this promising new class of drugs. American negotiators should push for five years of regulatory data protection for traditional, small-molecule medicines and 12 years of protection for biologics, consistent with U.S. law. This period of protection is particularly critical for biologics because of the growth in "biosimilars," a sophisticated form of knockoff. Mexico should also be encouraged to streamline its notoriously longwinded process for resolving patent disputes, which allow copycats to profit while cases are still in court.

Canada has seen welcome developments in recent months, with a court decision overturning the absurd "promise" doctrine, which Canada used to unilaterally void long-held patents through unpredictable judicial and bureaucratic interpretations – not coincidentally benefiting Canadian generic drug makers. However, Canada has imposed arbitrary price caps on new drugs in the past, failing to appropriately value the research and development investment required to invent them, and jeopardizing the longterm development of future cures. Just last month, Canadian regulators ordered an American pharmaceutical company to lower the price of its breakthrough treatment for a rare blood disorder.20 The decision was based exclusively on currency exchange fluctuations between 2012 and 2014, which increased the relative cost of the medicine – despite the company having no control over this variable. The renegotiated NAFTA agreement should include provisions requiring all government pricing decisions to appropriately value American innovation and be transparent, with input and opportunities for appeal for U.S. exporters.

MEDIA AND ENTERTAINMENT

With an abundance of copyrighted and trademarked assets, America's thriving media and entertainment industry also has a major interest in IP reform as part of the NAFTA renegotiation. The opportunity is significant: Canada is the third largest market for media and entertainment, Mexico the sixth, and American media exporters enjoy a \$1.35 billion trade surplus with both countries.^{21,22} Yet once again, this trade is not without complications, especially when it comes to IP. Crucially the provisions of NAFTA regarding IP protections, drafted in 1994 before several relevant international agreements, are obsolete and wholly insufficient in the era of the global digital media marketplace.

²² http://www.mpaa.org/wp-content/uploads/2017/06/MPAA-filing.pdf



¹⁹ http://trade.gov/topmarkets/pdf/Pharmaceuticals_Executive_Summary.pdf

http://www.benefitscanada.com/news/panel-orders-soliris-price-cut-but-rejects-clhia-bid-to-reimburse-private-payers-104341
 http://trade.gov/topmarkets/pdf/Media_and_Entertainment_Top_Markets_Report.pdf

One of the biggest issues in Mexico and many other markets is rampant content piracy, made easier than ever by the Internet and cheap duplication technology. Moreover, the country's authorities continue to focus on content piracy and counterfeiting in the form of physical products, neglecting online theft and distribution, which now represent the majority of transgressions.

To bring IP protections up to date for the digital age, a renegotiated NAFTA requires a number of measures, including civil and criminal penalties for illicit access to cable and satellite signals and large-scale infringement, including peer-to-peer sharing; bans on camcorders in theaters, which account for 90% of theft once a film is released; and a reliable regime for statutory damages to deter infringement. Mexico must also fully implement the WIPO treaties governing the Internet drawn up in 1996 and signed in 2002, which include basic technological protection measures to enable the digital trade in copyrighted material.

For its part, the Canadian media and entertainment marketplace isn't even covered in NAFTA because Canada obtained a sweeping "cultural" exemption from the treaty for these sectors, allowing that country's government to impose quotas that discriminate against American content makers. If U.S. trade negotiators are serious about modernizing the agreement, this remarkable unilateral exemption for Canada's media and entertainment needs to be rolled back. In addition to fulfilling NAFTA's original promise of free trade across borders, this reform would provide an opportunity to implement a fully updated regime of IP protections for media and entertainment exporters.

INFORMATION SERVICES

Commercial services are another key U.S. export area, and the biggest growth categories within service exports are all IP-dependent, including the provision of information technology and cloud computing services for commercial and institutional customers in categories spanning government, financial, healthcare, chemical, utilities, and medium-sized businesses.²³ Services that rely heavily on IP (including electronic, financial, and professional services, as well as royalty and license fees) made up 31% of total U.S. service exports to Mexico, bringing in over \$9 billion in 2014.²⁴

Unsurprisingly information services such as cloud computing and software-as-a-service (SAAS) are heavily dependent on comprehensive IP protections for a range of assets including codes, algorithms, and encryption keys. Once again NAFTA – drawn up before much of this technology even existed – is out of date and inadequate to meet the demands of 21st century cross-border trade in information services.

To support this fast-growing business, the U.S. should push for a number of updated IP protections, including stipulations that prohibit national governments from demanding that technology companies turn over IP assets like code and encryption keys to regulatory authorities. Similarly, under NAFTA as well as future trade agreements, governments should avoid erecting barriers to the free flow of data online by explicitly exempting data transmissions from customs duties.

²⁴ https://www.usitc.gov/publications/industry_econ_analysis_332/2016/mexico.htm



²³ https://www.export.gov/article?id=Mexico-Internet-and-IT-Services

The U.S. should also push back against any proposals by Canadian or Mexican trade negotiators demanding "localization" of data or residency requirements, forcing Internet companies to store user data in-country. It's worth noting that these tactics are favored by authoritarian governments which justify them on grounds of national security, but in fact use them to control their citizens' access to information; they are inappropriate and unnecessary for democratic regimes.²⁵

Finally, a revised NAFTA should require broader patent protections, for example by preventing national regulators from invalidating patents for new technologies on grounds that have not yet been commercially applied in that country. NAFTA should also reflect the enhanced protection of trade secrets adopted by the U.S. in 2016, which provides American companies with legal redress for technology-specific attacks through hacking and industrial espionage.

A MOMENT FOR STRATEGIC VISION

The renegotiation of NAFTA, and negotiations for all future trade agreements, will necessarily involve concessions and compromise. But if the Trump administration is serious about securing America's long-term economic interests, IP is one area where it will take a firm line from the beginning. Protecting the hard work and investments that make innovation possible is not just a matter of principle – it is the key to boosting American exports and employment, raising wages and productivity, and ensuring that this nation remains at the forefront of technology and creativity in a world defined by ever more rapid change. More than any commodity or consumer good, IP is the strategic asset of the information era, and it deserves a central place in U.S. trade policy.

 $^{^{25}\} http://www.itic.org/public-policy/2017.06.12 ITINAFTA Modernization Comments.pdf$



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