

Chinese trade reciprocity, WTO membership and US manufacturing job losses

While free trade has generally been a staple of the GOP policy agenda, Trump has raised some interesting and important questions about free trade vs fair trade, and the impact of trade deals on US manufacturing workers. Some details:

- The first chart on the next page shows an almost universal **lack of trade reciprocity** when it comes to tariffs applied BY the US, and tariffs applied TO the US; the former are always lower than the latter. While there are other benefits from this state of affairs (access to low-cost consumer goods, higher corporate profits, pursuit of geopolitical objectives), benefits and costs are not equally distributed
- The other charts show that after China joined the WTO, there was a collapse in US manufacturing employment and in labor's share of profits. There is a growing body of literature that shows **that import competition can have a direct impact on US manufacturing jobs**:
 - A January 2016 analysis from the Center for Economic Studies (a department of the US Census Bureau) found that from 1992 to 2007, import competition from China and other developing economies increased the likelihood of job loss among manufacturing workers with less than a high school degree, but not among workers with a college degree¹. Furthermore, unlike other studies², the authors did not find a link between technological investment and job loss.
 - A 2012 report from the Petersen Institute for International Economics highlighted the negative impact of foreign central bank currency intervention on US manufacturing workers³. The authors found that excess currency intervention increased the trade surpluses of intervening countries by \$400 to \$800 billion per year, resulting in 1 million to 5 million job losses in the US alone.
 - The most widely discussed analysis is "The China Shock"⁴, which found that from 1999 to 2011, import competition accounted for 2.4 million job losses, 1 million of which in manufacturing. **The authors agree that these concentrated job losses need to be understood within the broader context of the diffuse gains from trade.** However, as the lead author notes, **"It is incumbent on the literature to more convincingly estimate the gains from trade"**.
 - In the five years after China joined the WTO, foreign demand for Chinese goods may have accounted for as much as 70 million new Chinese jobs according to economists at the University of Groningen in the Netherlands⁵
- It's also worth noting that analyses of the 2016 US election found that the change in Republican voting was highly related to manufacturing job losses in predominantly Caucasian counties, and that import competition from China was related to more GOP votes as well⁶
- The 2017 IP Commission Report from the National Bureau of Asian Research cites **\$250-\$600 billion of annual losses to the US economy** from counterfeit goods, pirated software and theft of trade secrets, and describes **China** as "the world's principal intellectual property infringer"

¹ *Cheap imports and the loss of US manufacturing jobs*", Cooke, Kemeny and Rigby, Center for Economic Studies (Census Bureau), January 2016.

² A 2015 paper by Hicks and Devaraj (Ball State) found that 80% of US manufacturing job losses were related to technological advancement, and 20% resulted from import competition. However, our sense is that this paper is more of an accounting exercise than other peer-reviewed papers that perform treatment-control contrasts; it's also odd that their paper primary focuses on post-2006 when more manufacturing job losses occurred before then.

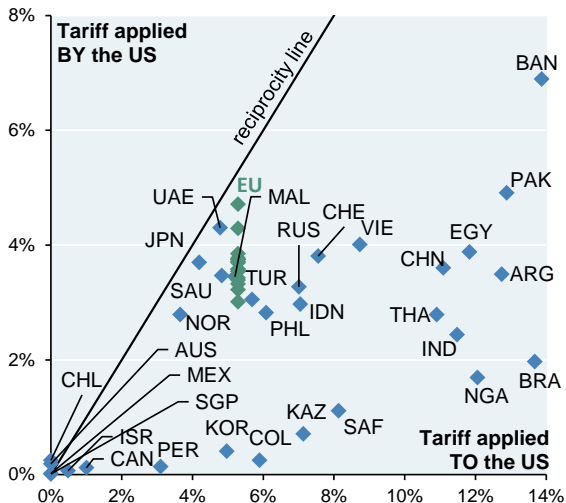
³ *"Currency manipulation, the US Economy and the Global Economic Order"*, Petersen Institute for International Economics, C Fred Bergsten and Joseph Gagnon, December 2012.

⁴ *"The China Shock"*, Autor, Dorn and Hanson, Annual Review of Economics, 2016.

⁵ *"How much do we really know about global trade's impacts?"*, NYT, September 6, 2016.

⁶ *"Manufacturing and the 2016 election"*, Petersen Institute, Freund and Sidhu, 2017; and *"A Note on the Effect of Rising Trade Exposure on the 2016 Presidential Election"*, Autor, Dorn, Hanson and Majlesi, 2017.

A general lack of tariff reciprocity



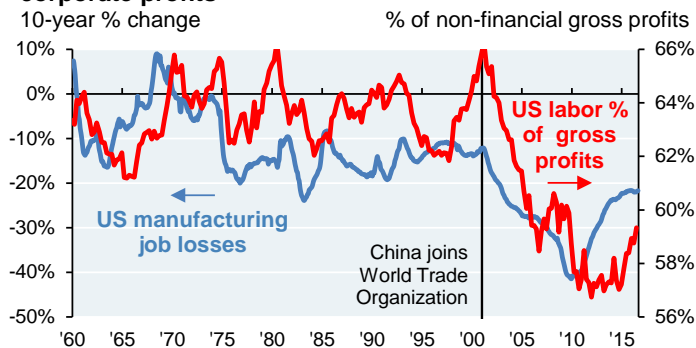
Source: WTO, World Bank, JPMAM. 2015, or most recent available. Tariff is simple average of tariffs on traded goods.

After China joins the WTO, its FX intervention rises and US manufacturing job losses accelerate...



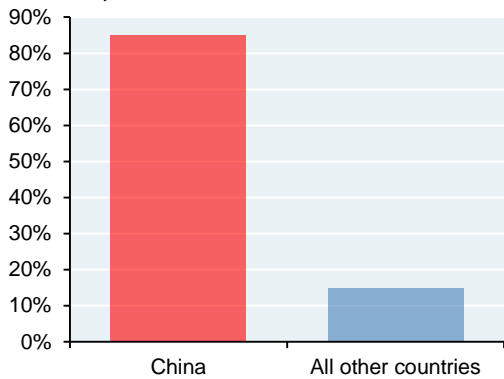
Source: BLS, IMF, People's Bank of China, BEA, JPMAM. August 2016.

...coinciding with a sharp decline in US labor's share of corporate profits



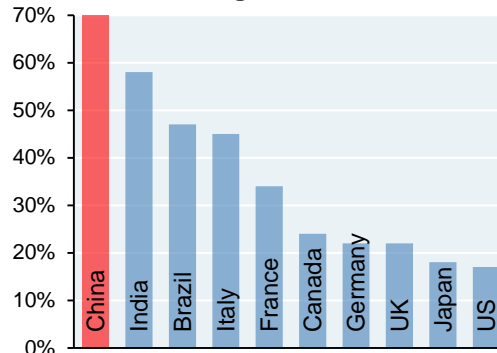
- The charts below show the degree of counterfeit goods exported to the US from China, the degree of Chinese pirated software and the very poor ranking China has with regards to inbound foreign direct investment

Source of counterfeit goods entering the US, %



Source: IP Commission Report. 2017.

Unlicensed software installation rate in world's ten largest economies, %



Source: BSA Global Software Survey. 2016.

Regulatory restrictions on inbound Foreign Direct Investment, Index, 0-1 scale



Source: OECD, 2016.

IMPORTANT INFORMATION

Purpose of This Material: This material is for information purposes only. The views, opinions, estimates and strategies expressed herein constitutes Michael Cembalest's judgment based on current market conditions and are subject to change without notice, and may differ from those expressed by other areas of J.P. Morgan. **This information in no way constitutes J.P. Morgan Research and should not be treated as such.**

Non-Reliance: We believe the information contained in this material to be reliable and have sought to take reasonable care in its preparation; however, we do not represent or warrant its accuracy, reliability or completeness, or accept any liability for any loss or damage (whether direct or indirect) arising out of the use of all or any part of this material. We do not make any representation or warranty with regard to any computations, graphs, tables, diagrams or commentary in this material which are provided for illustration/reference purposes only. We assume no duty to update any information in this material in the event that such information changes. Any projected results and risks are based solely on hypothetical examples cited, and actual results and risks will vary depending on specific circumstances. Forward looking statements should not be considered as guarantees or predictions of future events. **Investors may get back less than they invested, and past performance is not a reliable indicator of future results.**

Risks, Considerations and Additional information: There may be different or additional factors which are not reflected in this material, but which may impact on a client's portfolio or investment decision. The information contained in this material is intended as general market commentary and should not be relied upon in isolation for the purpose of making an investment decision. Nothing in this document shall be construed as giving rise to any duty of care owed to, or advisory relationship with, you or any third party. Nothing in this document is intended to constitute a representation that any investment strategy or product is suitable for you. You should consider carefully whether any products and strategies discussed are suitable for your needs, and to obtain additional information prior to making an investment decision. Nothing in this document shall be regarded as an offer, solicitation, recommendation or advice (whether financial, accounting, legal, tax or other) given by J.P. Morgan and/or its officers or employees, irrespective of whether or not such communication was given at your request. J.P. Morgan and its affiliates and employees do not provide tax, legal or accounting advice. You should consult your own tax, legal and accounting advisors before engaging in any financial transactions.

Contact your J.P. Morgan representative for additional information concerning your personal investment goals. You should be aware of the general and specific risks relevant to the matters discussed in the material. You will independently, without any reliance on J.P. Morgan, make your own judgment and decision with respect to any investment referenced in this material.

J.P. Morgan may hold a position for itself or our other clients which may not be consistent with the information, opinions, estimates, investment strategies or views expressed in this document. JPMorgan Chase & Co. or its affiliates may hold a position or act as market maker in the financial instruments of any issuer discussed herein or act as an underwriter, placement agent, advisor or lender to such issuer.

References in this report to "J.P. Morgan" are to JPMorgan Chase & Co., its subsidiaries and affiliates worldwide.

Legal Entities and Regulatory Information: In the **United States**, Bank deposit accounts, such as checking, savings and bank lending, may be subject to approval. Deposit products and related services are offered by **JPMorgan Chase Bank, N.A.** Member FDIC.

JPMorgan Chase Bank, N.A. and its affiliates (collectively "**JPMCB**") offer investment products, which may include bank managed accounts and custody, as part of its trust and fiduciary services. Other investment products and services, such as brokerage and advisory accounts, are offered through **J.P. Morgan Securities LLC ("JPMS")**, a member of FINRA and SIPC. **JPMCB** and **JPMS** are affiliated companies under the common control of JPMorgan Chase & Co. Products not available in all states.

In the **United Kingdom**, this material is issued by **J.P. Morgan International Bank Limited (JPMIB)** with the registered office located at 25 Bank Street, Canary Wharf, London E14 5JP, registered in England No. 03838766. JPMIB is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. In addition, this material may be distributed by: **JPMorgan Chase Bank, N.A. ("JPMCB"), Paris branch**, which is regulated by the French banking authorities Autorité de Contrôle Prudentiel et de Résolution and Autorité des Marchés Financiers; **J.P. Morgan (Suisse) SA**, regulated as bank and securities dealer by the Swiss Financial Market Supervisory Authority FINMA; **JPMCB**; **JPMCB Dubai branch**, regulated by the Dubai Financial Services Authority; **JPMCB Bahrain branch**, licensed as a conventional wholesale bank by the Central Bank of Bahrain (for professional clients only).

In **Hong Kong**, this material is distributed by **JPMCB, Hong Kong branch**. JPMCB, Hong Kong branch is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission of Hong Kong. In Hong Kong, we will cease to use your personal data for our marketing purposes without charge if you so request. In **Singapore**, this material is distributed by **JPMCB, Singapore branch**. JPMCB, Singapore branch is regulated by the Monetary Authority of Singapore. Dealing and advisory services and discretionary investment management services are provided to you by JPMCB, Hong Kong/Singapore branch (as notified to you). Banking and custody services are provided to you by JPMIB and/or JPMCB Singapore Branch. The contents of this document have not been reviewed by any regulatory authority in Hong Kong, Singapore or any other jurisdictions. You are advised to exercise caution in relation to this document. If you are in any doubt about any of the contents of this document, you should obtain independent professional advice.

With respect to countries in **Latin America**, the distribution of this material may be restricted in certain jurisdictions. Receipt of this material does not constitute an offer or solicitation to any person in any jurisdiction in which such offer or solicitation is not authorized or to any person to whom it would be unlawful to make such offer or solicitation. To the extent this content makes reference to a fund, the Fund may not be publicly offered in any Latin American country, without previous registration of such fund's securities in compliance with the laws of the corresponding jurisdiction. Public Offering of any security, including the shares of the Fund, without previous registration at Brazilian Securities and Exchange Commission – CVM is completely prohibited. Some products or services contained in the materials might not be currently provided by the Brazilian and Mexican platforms.

This material should not be duplicated or redistributed without our permission.

© 2017 JPMorgan Chase & Co. All rights reserved.