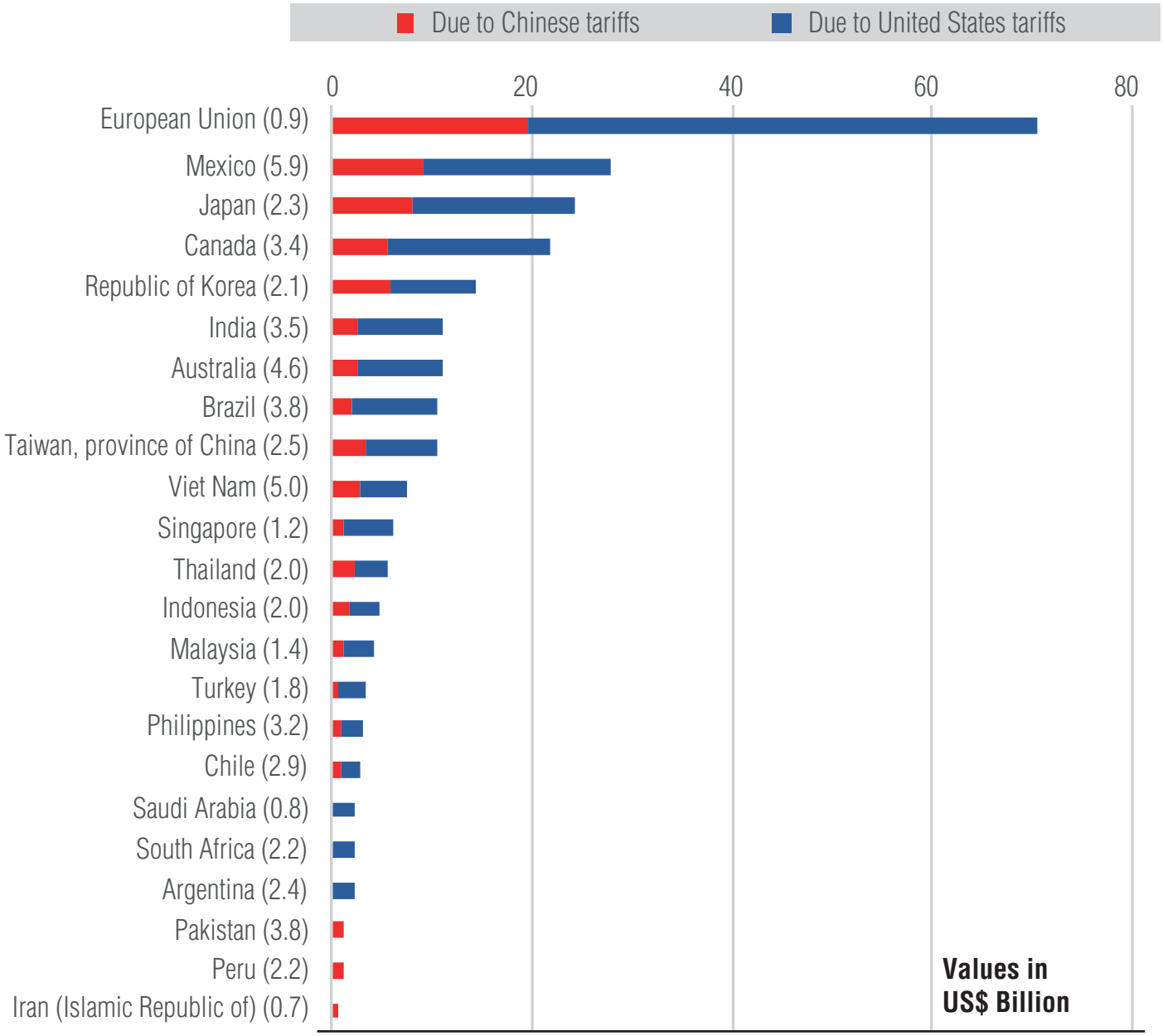
Trade Diversion

U.S. and China's tariffs will divert trade to other countries



Source: UNCTAD

Note: Numbers in parentheses represent exports gains as a percentage of total exports by the country in 2017.

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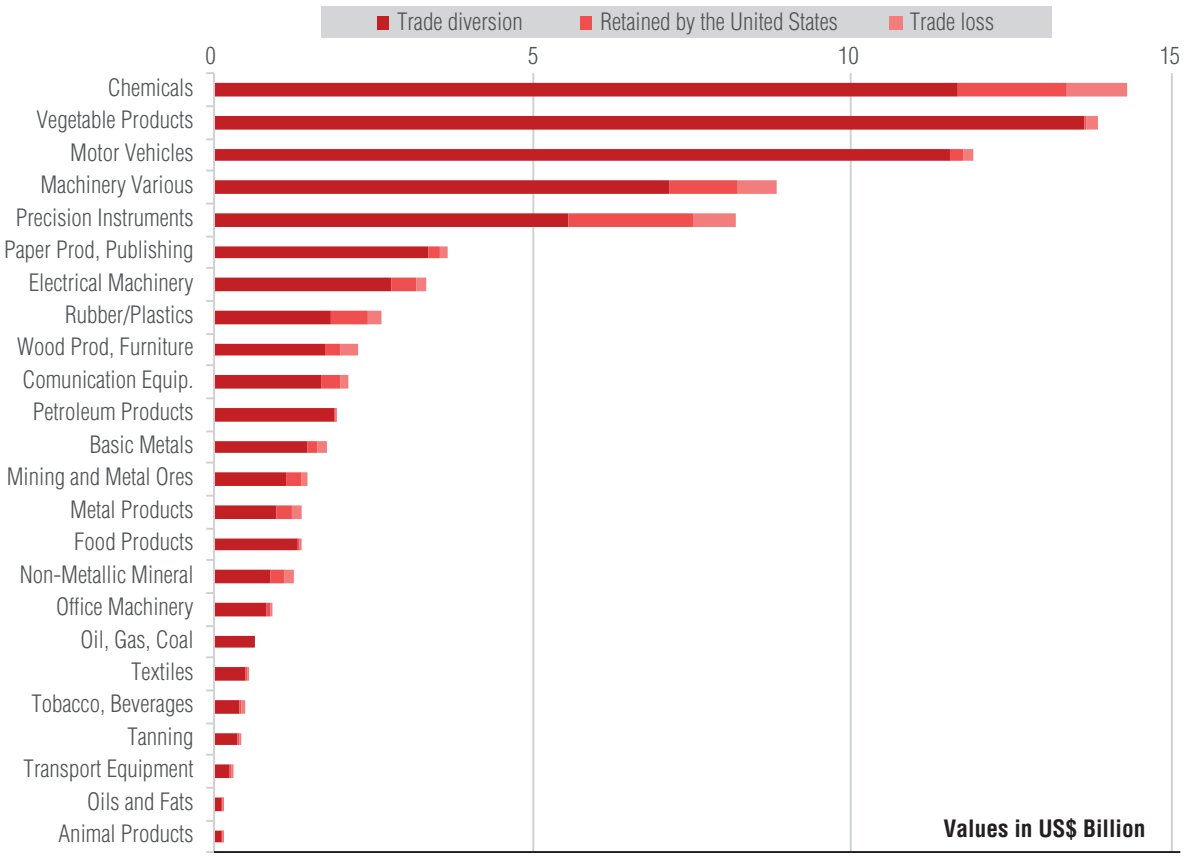
Sectoral Effects of China Tariffs

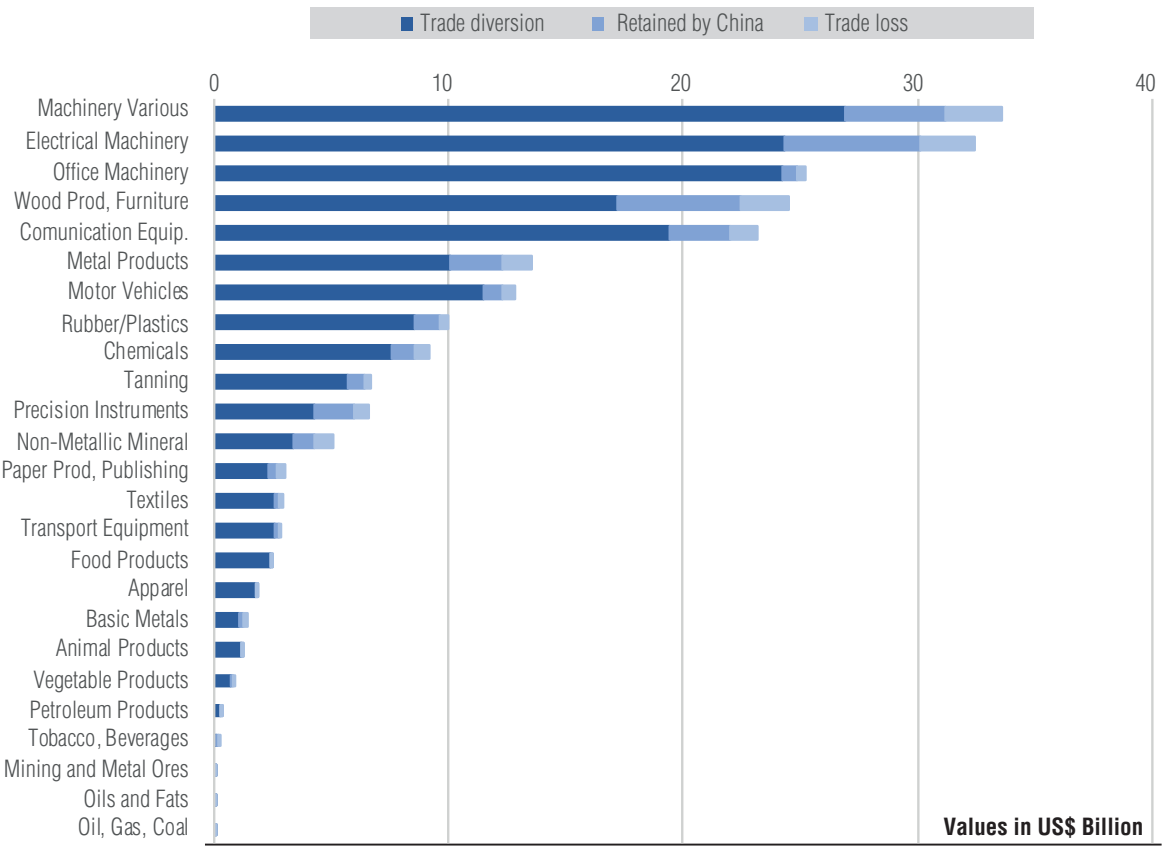
Effects will be larger for chemicals, vegetables and the auto sectors



Source: UNCTAD

Sectoral Effects of U.S. Tariffs

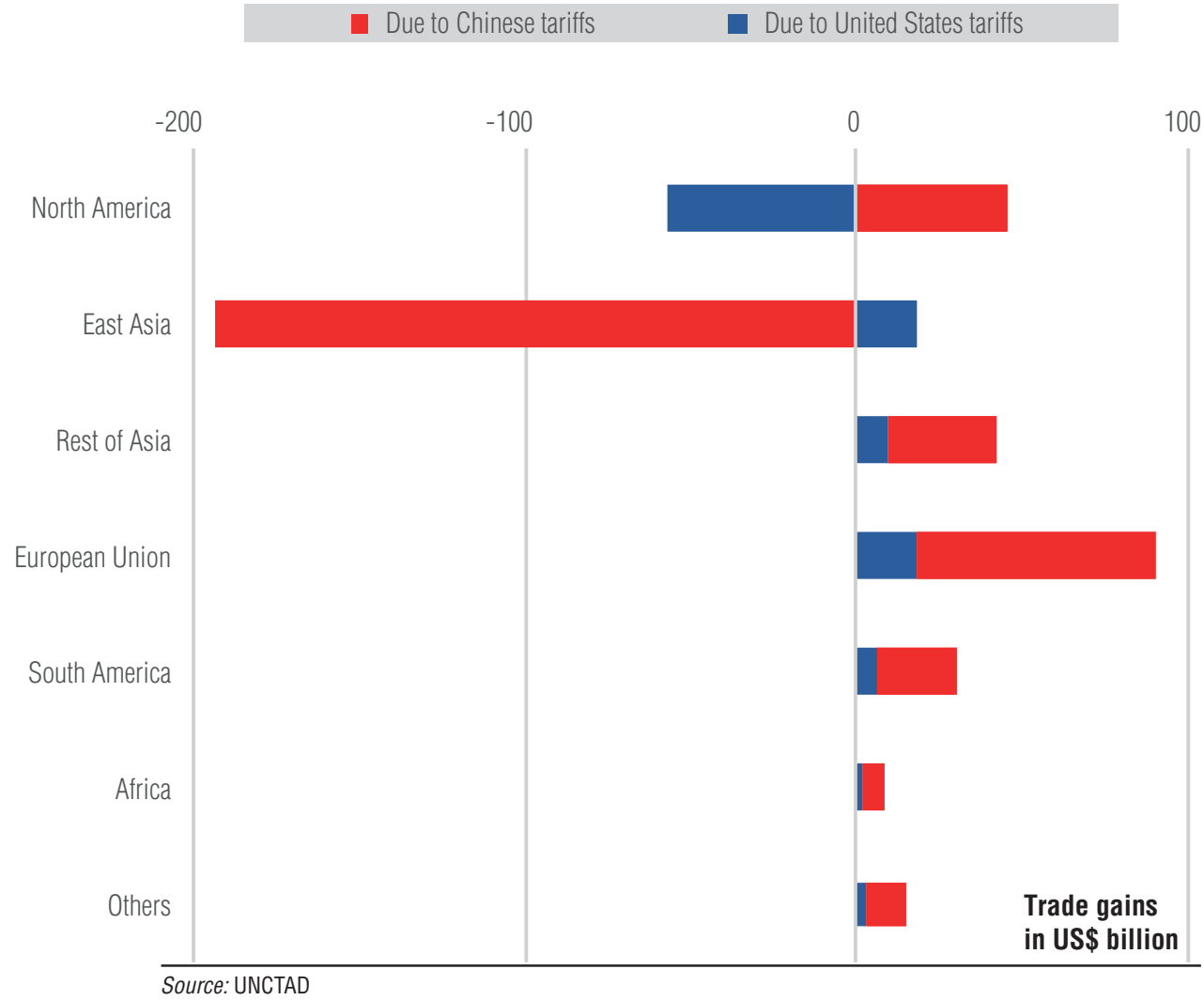
Machinery sectors will see strong trade diversion effects



Source: UNCTAD

Regional Value Chain Effects

Tariffs would have larger impact for East Asian regional value chains



Source: UNCTAD

These figures summarize the effect of 25 per cent tariffs applied to the United States of America and Chinese lists of goods affected by retaliatory tariffs as September 2018. Trade diversion, trade retained and trade loss are calculated using trade elasticities from the economic literature. In particular, elasticities of substitution (from Broda and Weinstain: Globalization and the gains from variety, *Quarterly Journal of Economics,* Volume 121, Issue 2, 2006) are used to approximate how much trade for each of the affected products is likely to be diverted to a third country. In intuitive terms, homogeneous goods (e.g. soybeans) tend to have a higher degree of substitution to third countries (e.g. from the United States to Brazil) than more sophisticated goods where quality plays a more important role in shaping consumer demand (e.g. motor vehicles). Therefore, identical tariffs can have very different trade diversion effects, depending on the nature of the good. Trade losses are calculated using import demand elasticities (from Kee, Nicita and Olarreaga: Import demand elasticities and trade distortions, *The Review of Economics and Statistics*, Volume 9, Issue 4, 2008). This elasticity measures how much of the bilateral trade is likely to be retained and how much will be lost. In intuitive terms, tariffs in goods where demand is inelastic to prices (e.g. tobacco products) will not result in large trade losses. On the other hand, tariffs on products which are very sensitive to price changes will result in lower demand and therefore larger trade losses. Export supply elasticities (from Nicita, Peri and Olarreaga: Cooperation in WTO's tariff waters, *Journal of Political Economy*, Volume 126, Issue 3, 2018) are used to approximate how trade diversion effects are allocated across third countries. In intuitive terms, the trade diversion effects are to be captured by a third country, depending on its competitiveness in exporting the given product. Export supply elasticities approximate such competitiveness at the product level. Finally, the effects on global value chains are calculated at the regional level by assuming a proportional decline in traded inputs. For example, trade diverted from China to countries outside the East Asian region is assumed to result in suppliers of intermediate products serving that trade also moving away from the East Asian region. More details are available on request.