Global Economic Prospects
June 2017

HIGHLIGHTS from SPECIAL FOCUS 2
ARM'S-LENGTH TRADE: A SOURCE OF POST-CRISIS TRADE WEAKNESS[1]

Key Points

- *Global trade growth has slowed sharply since the global financial crisis. In the United States—the main export market for one-fifth of the world's countries—trade growth slowed to 1.1 percent in 2016, from a pre-crisis average of 5.8 percent.*
- *Most of the decline in U.S. trade growth after the 2007-09 global financial crisis is accounted for by the decline in arm's-length U.S. trade, that is, trade between unaffiliated firms. Intra-firm trade growth, in contrast, has returned to close to its pre-crisis average.*
- *The post-crisis weakness of arm's-length U.S. trade mainly reflects its composition. Arm's length trade is heavily tilted towards trade with emerging markets, where growth has slowed sharply. It is also substantially made up of trade in sectors that have languished post-crisis.*

U.S. role in global trade. Global trade volume growth reached a post-crisis low of 2.5 percent in 2016—significantly below the pre-crisis average of 7.6 percent. An even steeper decline was observed in the United States, which accounts for about 11 percent of global goods trade and is the largest export destination for one-fifth of the world's countries.

Arm's-length trade: source of post-crisis trade weakness. Most of the post-crisis slowdown in U.S. trade growth can be attributed to the sharp deceleration in arm's-length trade. Arm's-length U.S. trade growth exceeded U.S. intra-firm trade growth on average by 1.6 percentage point pre-crisis (2002-08) but fell short of U.S. intra-firm trade growth by 1.7 percentage point post-crisis (2010-14). By 2014, intra-firm trade growth had returned to near pre-crisis rates while arm's-length trade growth still lagged significantly behind elevated pre-crisis rates (Figure SF2.A and B).

Arm's-length versus intra-firm trade. Just over half (about 57 percent) of total U.S. trade is conducted at arm's-length between unrelated firms. The share of arm's-length trade is much lower for U.S. imports (50 percent) than exports (70 percent), for U.S. trade in capital goods (50 percent) than final goods (60 percent), and for U.S. trade with advanced economies (51 percent) than with EMDEs (64 percent, Figure SF2.C).

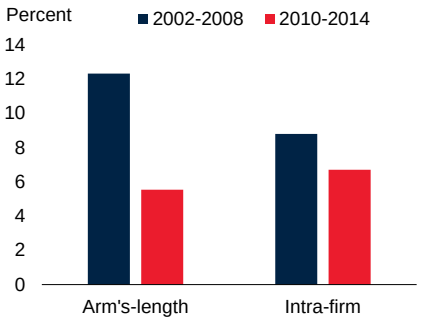
Factors contributing to arm's-length trade weakness: Composition. Compositional differences are the main reason behind the steeper-than-average slowdown in arm's-length trade growth. A greater share of U.S. arm's-length exports than intra-firm exports is shipped to EMDEs. Just as the rapid pre-crisis growth in these economies lifted arm's-length export growth, their sharp post-crisis growth slowdown dampened it. Second, arm's-length exports include a greater share of sectors such as textiles and apparel and machinery that grew rapidly pre-crisis but have struggled post-crisis, or sectors that benefited from the pre-crisis commodity price boom, such as mining, metals and energy. Had the composition of arm's-length trade matched that of average exports and imports, arm's-length export and import growth would have slowed by 1.2 and 1.8 percentage points less between the pre-crisis and post-crisis periods, respectively (Figure SF2.E and F).

[1] This Special Focus was prepared by Csilla Lakatos and Franziska Ohnsorge.

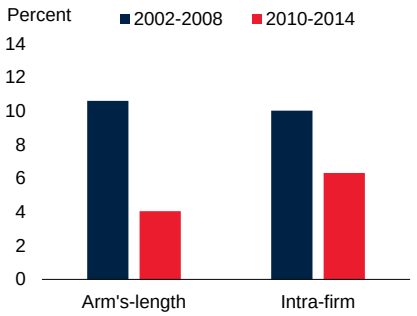
Figure SF2. U.S. Trade Growth

After the 2007-2009 financial crisis, arm's-length U.S. trade growth has slowed considerably more sharply than intra-firm trade growth. Arm's-length trade accounts for about 57 percent of total U.S. trade and is more heavily exposed than intra-firm trade to EMDEs and sectors that have languished post-crisis. Such compositional differences are a key source of a steeper-than-average slowdown in arm's-length trade growth.

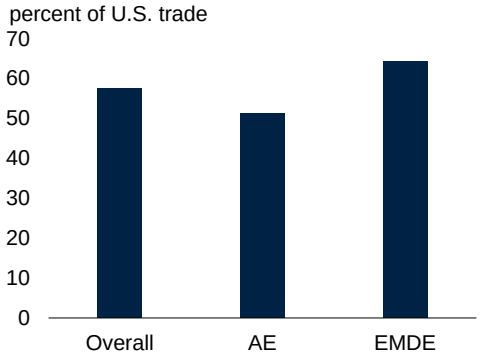
A. U.S. export growth



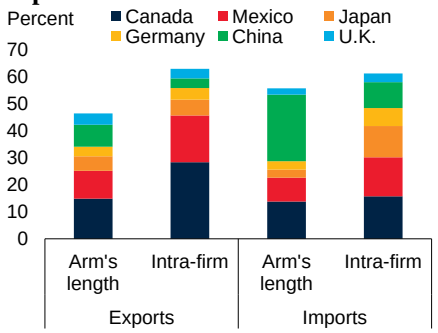
B. U.S. import growth



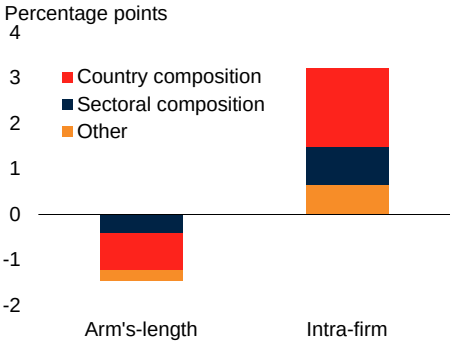
C. Share of arm's-length trade in total U.S. trade



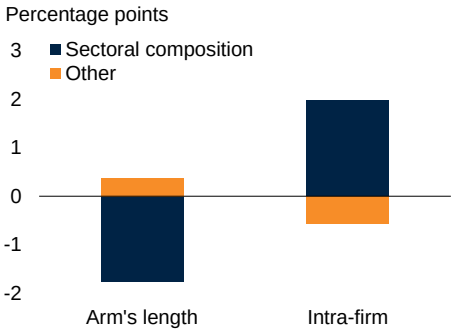
D. Main destinations and sources of U.S. exports and imports



E. Contribution to deviation from average U.S. export growth, change 2002-08 to 2010-14



F. Contribution to deviation from average U.S. import growth, change 2002-08 to 2010-14



Sources: U.S. Census Bureau.
A. B. U.S. exports and imports of goods based on data from the U.S. Census Bureau. Global data is not available.
C. U.S. exports and imports of goods, average for 2002-14. The residual to 100 percent is the share of arm's-length trade in total U.S. goods exports or goods imports with the world, advanced economies (AEs) or EMDEs. The shares are broadly stable over the period. AE stands for advanced economies.
D. Residual to 100 percent is the share of all other countries in total U.S. arm's-length or intra-firm exports or imports.
E. F. "Country composition" measures the extent to which growth in arm's-length or related-party exports exceeded that of total exports due to a higher initial share of fast-growing countries. It is defined as the difference between hypothetical arm's-length export growth if arm's-length exports to each country had grown at the same rate as total exports to each country, and actual total export growth. "Sectoral composition" measures the extent to which growth in arm's-length or intra-firm exports exceeded that of total exports because of a higher initial share of fast-growing sectors. It is defined as the difference between hypothetical arm's-length (intra-firm) export growth had arm's-length (intra-firm) sectoral exports grown at the same rate as total sectoral exports, and actual total export growth. "Other" includes the contribution of faster-than-average bilateral arm's-length (intra-firm) trade growth within each sector. The figure shows the change in these contributions between the 2002-08 average and the 2010-14 average.