Global value chains and finance

Hyun Song Shin*, Economic Adviser and Head of Research, BIS
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*The views expressed here are mine and not necessarily those of the Bank for International Settlements
PMIs for the manufacturing sector

Diffusion indices

The dots indicate observations for the last two months.

1 A value of 50 indicates that the number of firms reporting improvement and deterioration is equal; a value above 50 indicates improvement.

Source: IHS Markit.
Network structure of global value chains in 2000 and 2017

Ratio of world goods exports to world GDP

In constant prices, Q1 2000 = 100

Sources: IMF, *World Economic Outlook*; World Trade Organization; Datastream; national data; BIS calculations.
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Inventories and trade
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<td>Receivables</td>
<td>Payables</td>
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<td>Long-term assets</td>
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### Assets
- **Cash**
- (1 period old) (=\(v\))
- Receivables
- Long-term assets

### Liabilities
- **Equity**
- **Short-term debt**
- **Payables**
- Long-term liabilities
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<td>Equity</td>
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<tr>
<td>(1 period old) ($=\nu$)</td>
<td>Short-term debt</td>
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<tr>
<td>Inventories (2 periods old) ($=2\nu$)</td>
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<tr>
<td>Receivables</td>
<td>Payables</td>
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<tr>
<td>Long-term assets</td>
<td>Long-term liabilities</td>
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Inventories (1 period old) \( = \nu \)

Inventories (2 periods old) \( = 2\nu \)

Inventories (3 periods old) \( = 3\nu \)

Assets

Liabilities

Date 1 | Date 2 | Date 3

Stage 1

\( \nu \)

Stage 2

\( 2\nu \)

Stage 3

\( 3\nu \)

Cash

Equity

(1 period old) \( = \nu \)

Inventories

(2 periods old) \( = 2\nu \)

Inventories

(3 periods old) \( = 3\nu \)

 Receivables

Payables

Long-term assets

Short-term debt

Long-term liabilities
GVC of four links needs funding of $4v + 3v + 2v + v$.
Funding need grows rapidly – at rate of **square** of length of GVC.
If GVC crosses the boundary of the firm, then receivables are financed with payables and external debt.
Goods exports and the dollar index

Global trade and US dollar
Q1 2000 = 100

Lhs:
- US dollar index$^3$

Rhs:
- World goods exports / GDP$^4$

BIS
Dollar-denominated credit to EMEs and the dollar index
Banking sector assets and book equity

Advanced economies, 75 banks

Graph 7.1

1 Sum of respective variables. Ln denotes natural logarithm.

Sources: Datastream; BIS calculations.
Total retained earnings and accumulated dividends

By region, 2018

Graph 8.2

USD bn

- **United States**: 1,066 USD bn (365 retained earnings, 74 cumulative dividends)
- **Japan**: 413 USD bn (265 retained earnings, 180 cumulative dividends)
- **Euro area**: 345 USD bn (249 retained earnings, 365 cumulative dividends)
- **Other European countries**: 292 USD bn (229 retained earnings, 265 cumulative dividends)
- **Australia & Canada**: 229 USD bn (229 retained earnings, 265 cumulative dividends)

1 Denmark, Norway, Sweden, Switzerland and the United Kingdom.

Sources: S&P Capital IQ; BIS calculations.
### United States
- Bank of America Corporation
- Bank of New York Mellon Corporation
- BB&T Corporation
- Capital One Financial Corporation
- Citigroup Inc.
- Citizens Financial Group, Inc.
- Fifth Third Bancorp
- Goldman Sachs Group, Inc.
- JPMorgan Chase & Co.
- Morgan Stanley
- Northern Trust Corporation
- PNC Financial Services Group, Inc.
- Regions Financial Corporation
- State Street Corporation
- SunTrust Banks, Inc.
- U.S. Bancorp
- Wells Fargo & Company

### Japan
- Chiba Bank, Ltd.
- Fukuoka Financial Group, Inc.
- Hokuhoku Financial Group, Inc.
- Mizuho Financial Group, Inc.
- Resona Holdings, Inc.
- Shizuoka Bank, Ltd.
- Sumitomo Mitsui Financial Group, Inc.
- Sumitomo Mitsui Trust Holdings, Inc.

### Euro area
- AIB Group Plc
- Banca Monte dei Paschi di Siena SpA
- Banco Bilbao Vizcaya Argentaria, SA
- Banco de Sabadell, SA
- Banco Popolare Società Cooperativa
- Banco Popular Español, SA
- Banco Santander, SA
- Bankia, SA
- BNP Paribas SA
- CaixaBank, SA
- Commerzbank AG
- Crédit Agricole SA
- Crédit Industriel et Commercial SA
- Deutsche Bank AG
- Dexia SA
- Erste Group Bank AG
- Governor and Company of the Bank of Ireland
- ING Groep NV
- Intesa Sanpaolo SpA
- KBC Group NV
- Natixis SA
- Raiffeisen Bank International AG
- Société Générale SA
- UniCredit SpA
- Unione di Banche Italiane SpA

### Other European countries
- Barclays Plc
- Credit Suisse Group AG
- Danske Bank A/S
- DNB ASA
- HSBC Holdings Plc
- Lloyds Banking Group Plc
- Nordea Bank Abp
- Royal Bank of Scotland Group Plc
- Skandinaviska Enskilda Banken AB
- Standard Chartered Plc
- Svenska Handelsbanken AB
- Swedbank AB
- UBS Group AG

### Australia & Canada
- Australia and New Zealand Banking Group Ltd.
- Commonwealth Bank of Australia
- Macquarie Group Ltd.
- National Australia Bank Ltd.
- Westpac Banking Corporation
- Bank of Montreal
- Bank of Nova Scotia
- Canadian Imperial Bank of Commerce
- National Bank of Canada
- Royal Bank of Canada
- Toronto-Dominion Bank