

# Globalization, Economic Statistics, Policy, Business Decisions, and Politics

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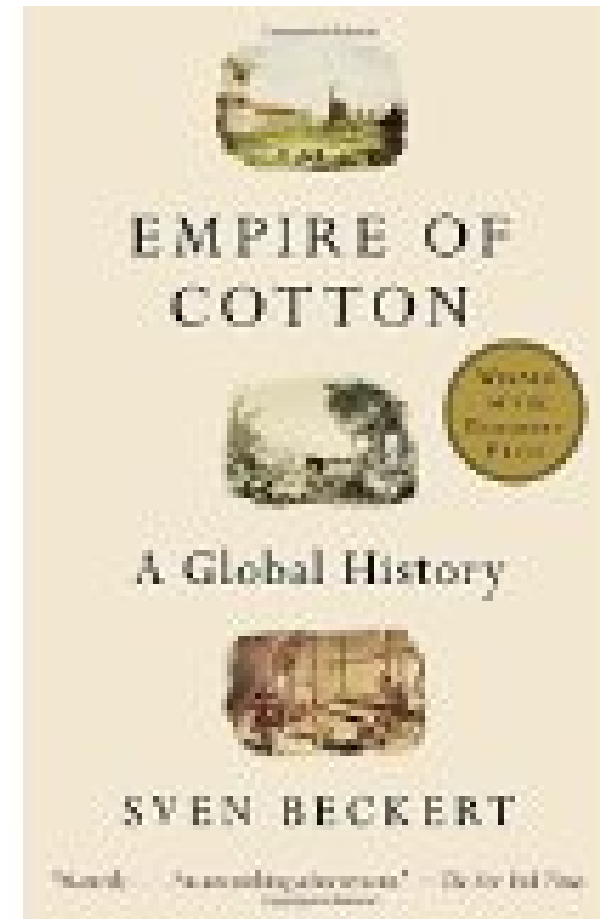
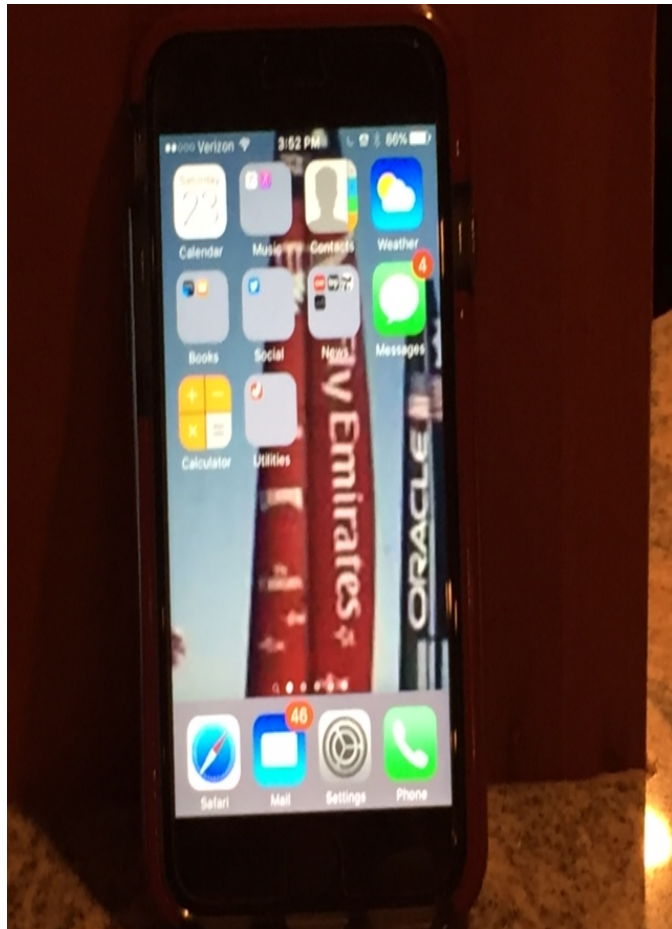
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# Response to UNSC 2015 Charge

- Address a multitude of measurement challenges in the area of trade and globalization – in part - through the development of a handbook on a system of extended international and global accounts:
  - This handbook will be designed to provide an overarching measurement framework
  - That addresses measurement challenges associated with trade, financial, environmental, and social integration around the globe.

# Is Globalization Really New? (And Do We Really Need New Measures?)



# Not New But There Has Been A Dramatic Increase in Global Trade's Share of World GDP

## Globalization over 5 centuries (1500-2011)

Shown is the sum of world exports and imports as a share of world GDP (%)

The individual series are labeled with the source of the data



Data sources: Klasing and Milionis (2014), Estevadeordal, Frantz and Taylor (2003) and the Penn World Tables Version 8.1  
The interactive data visualization is available at [OurWorldinData.org](https://OurWorldinData.org). There you find the raw data and more visualizations on this topic.

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# So What Has Changed in the International Economy and in Economic Measurement?

- Globalization of production, and income, and spending
- Globalization of finance
- Globalization of natural resources and the environment

# Accelerating Globalization

- Firms maximize production efficiency and minimize global tax burdens by organizing across national boundaries.
  - Advances in technology and communication and reductions in shipping costs have accelerated pace of global production.
  - Increased international trade, global growth, and productivity, but have caused significant problems for the measurement of economic activity.

# Globalization and Double Counting

- Increasing globalization has led to increasing volume of double counting in both the real and financial sector.
  - Traditional trade measures count gross flows as exports and imports each time they cross international borders
    - Gross flows often do not reflect the value-added of the exporting country in the production of the goods or services.
  - Similarly, in the financial sector, increasing complexity and the global nature of financial transactions have resulted in a system where official statistics can provide a misleading picture of the ultimate cross-country financial risk.

# Existing International Statistics Have – In Some Respects- Not Kept Up with Globalization

- These changes have reduced the relevance of existing statistics for policymakers, business, investors, and researchers
  - Remain invaluable, but need extension to improve understanding and public policy
  - Critical need to “look-through” complex global production and financial transactions
    - Protectionist pressures
    - Financial crisis
    - Trade and tax policies
    - Development policies
    - Global monetary and fiscal policy



# How Has the Research and Measurement Community Responded to Globalization?

- Case studies (Passenger and Transit Rail Vehicles, Transportation, Smart Grid, iPhone, etc)
- Ownership-based accounts
- Studies of MNC's, including ownership-based accounts
- Research on modes of supply, business functions,
- Studies of Vertical specialization
- Use of global I-O accounts to estimate value-added trade
- Development of Integrated real and financial models
- Development of global environmental economic impact models
- Key leadership and research on the part of the official statistical community in various areas ranging from OECD/TIVA and IMF/Financial Gaps to UN/SEEA and UNECE Globalization

# This Research Has Helped Illustrate How Better Data Could Improve Policy

- Better targeting public policy and informing public perceptions:
  - Drilling down beneath gross/counterparty trade and investment flows and can provide a more accurate, and relevant picture of the underlying pattern of economic activity across countries.
  - A fuller picture of the critical dependencies and benefits that arise from global production and trade can provide an improved basis for public understanding of the dynamics of global trade and investment and for public policy.

# Some “Early” Examples of the Impact of Better Global Measures

- Use of data on the worldwide operations of multinational companies (MNCs)
- Use of such data to look at:
  - Competitiveness
  - Taxes
  - International trade
  - Profits and other income
- U.S. Congress supported and provided funds to expand U.S. statistical measures of MNCs and to improve the Congress’ understanding of their activities and their impact on the U.S. economy.

# Impact of Increasing Globalization and Spread of Global Value Chains: Declining U.S. Competitiveness?

Lipsey and Kravis (1992) found that in contrast to BOP-based measures, U.S. competitiveness-- as measured by the U.S. share of world trade -- was not declining.

- This result helped refocus research on U.S. competitiveness on such issues as domestic taxes and regulations rather than concerns about the U.S. losing its edge in entrepreneurship and innovation.
- It and other MNC research also demonstrated that a large share of U.S. exports and imports were really to and from U.S. owned companies.
- This research and the BEA MNC data prompted an entire body of U.S. research on MNC's including the complex determinants and interdependencies of global taxes, investment, trade, production, and productivity.
  - These studies provide much of the basic information used in U.S. analysis and policy regarding U.S. MNC's and taxes, trade, and investment.

# A Comparison of U.S. International Economic Performances Under Different Frameworks, 1991

	Residency-based frameworks		Ownership-based frameworks	
	Cross-border trade	Alternative, including both cross-border trade and net sales through affiliates	National Academy of Sciences proposal	Julius proposal
U.S. sales to foreigners	581	632	816	2,523
U.S. purchases from foreigners	609	608	652	2,499
Balance	-28	24	164	24

# Ownership-Based Satellite Accounts

- These BEA satellite account estimates continue to be produced and like all satellite account estimates are directly linked back to BEA's BOP estimates, including:
  - Decomposition of the distribution of the proceeds from U.S. foreign affiliates sales abroad, including their contribution to overseas economies and to the U.S. economy, including such data as foreign sales contribution to U.S. foreign direct investment income and to U.S. profits.
- Such data feed into strong interest by Treasury Secretary O'Neil in global value chains (especially the contribution of foreign operation to U.S. companies) and a request to BEA to institutionalize and expand their early satellite accounts.
  - Paul O'Neill was former CEO of ALCOA, where he significantly expanded the company's overseas operations and sales.

# Why Are We Looking at Policy Needs in Trying to Decide What A Handbook Should Contain?

- Many, if not most, questions related to the scope, concepts, definitions, and methods of a set of statistics can best be answered by reference to the purpose of the statistics.
  - What policy, business, or research questions are the statistics intended to answer?
  - Providing answers to such questions through a continuous process of updating is essential to maintaining the relevance of economic statistics.

# Examples of the Impact of Information Gaps Arising from Globalization on Economic Policy, Politics, and Business Decisions: Trade, Investment, and Development Policy

- Trade, investment, and development policies based on gross trade flows and bilateral balances that distort the value-added contributions of trade to nations income and growth;
  - Use of existing data on the manufacturing value-added and compensation may significantly overstate the returns to focusing on industrial development for developing economies and understate the returns to services.
  - Global estimates on value-added chains can -- as in the case of the iPhone -- show that the “manufacturing/final assembly” share of the final product is small relative to the services share.
  - This is an important lesson for both developed and developing economies.
    - Examples include U.S. support for re-industrializing America at the highest levels of the Administration.



# Monetary Policy and Financial Regulatory Policy

- Monetary and financial regulatory policies based on cross-border financial flows, and positions, that distort the ultimate ownership and composition of assets and liabilities and cross-border risk.
  - The complexity, lack of transparency, use of cross-border data, and the absence of aggregate data on ultimate risk was a major problem during the international financial crisis.
    - EU officials initially regarded the U.S. subprime mortgage market crisis as a U.S. phenomena and significantly underestimated their exposure to risk.

# Monetary Policy and Financial Regulatory Policy

- Problems in the measurement of prices and productivity caused by globalization may significantly bias estimates of inflation, growth, and productivity.
  - Accurate data on these variables are critical to today's "data-driven" monetary policy and monetary-rules, like the Taylor rule.

# Tax and Investment Policies

- Tax and investment policies based on gross flows and intra-firm transfer prices, especially for intellectual property, that distort the underlying flows of production, investment, and income;
  - To the extent tax analysis of global enterprises only take into account the static impact of tax changes, they may significantly under or overestimate the ultimate impact on enterprises competitiveness, sales, and taxes.
  - Just as there are calls for dynamic scoring of the impact of tax changes, GVC accounts could provide a basis for dynamic scoring of tax changes affecting MNCs.

# Tax and Investment Policies

- Large value-added benefits to parent-company countries and domestic non-traded goods sectors (services) ignored in static tax analysis.
  - Changes in tax law that ignored these benefits might not only reduce (rather than raise) net domestic tax receipts, but lower domestic production and employment.
- Integrated financial accounts and formulary accounting would also improve ability to “look through” transactions and identify true geography of economic benefits.
  - Over 40% of U.S. Foreign Direct Investment through tax havens

# Unfair Trade Practices Cases, IP Protection, Subsidies, and Guaranteed Loans

- Significant potential costs to such cases:
  - Direct costs to government and taxpayers, higher costs to importers, and higher prices of imported goods for consumers.
  - Costs can only be justified if there is a significant economic harm
    - As illustrated by use of trade in value-added estimates, gross trade flows can be an incomplete guide, especially for specific industries and products, of the impact of unfair trade on the economy.
    - EU trade sanctions against footwear made in Asia when as much as 80% of the valued-added from Asian-made footwear estimated to originate in EU. (Ahmad and Ribarsky , OECD, 2014)
  - Interest in such broader analysis of the impacts of trade and prices on the economy have played a role in the U.S. International Trade Commission being a leader on research in value added trade (Koopman, Wang, and Wei, AEA, Feb 2014)

# Environmental and Energy Policies

- Existing data used for environmental and energy policies are based on trade and production classifications that fail to provide a clear picture of the geographic distribution of the production and income and ownership (property rights) associated with polluting activities.
  - Such baseline data distort estimates of the international costs and benefits of these activities and policies based on these estimates.
    - The costs of pollution control, for example, may well have a significantly larger than anticipated impact on upstream countries.
    - Integrated global value chain estimates could provide significantly more complete and accurate impact of the domestic, regional, and global economic impact of environmental policies such as climate change.

# Uses of Global Value Chain Accounts for Other Policies, Business Decisions, and Public Perceptions

- Critical materials, food safety, and national security policies based on gross flows that fail to provide information on the production and value-added trail of key products that are vital to designing adequate health, safety, and security measures in today's global environment.
- Business and financial decisions based benchmarking to gross real and financial flows, and positions, and classification systems, that distort returns, risk, competitive position, and critical linkages.
- Political opinions and decisions based on distorted information regarding international trade, finance, and the environment.

# What to Do?

- These issues notwithstanding, the existing national and international accounts continue to provide essential data to guide macroeconomic and other policies.
  - Overburdening them by trying to have them address the wide range of measurement issues posed by globalization would reduce their usefulness for key fiscal, monetary, regulatory, and other policy issues.
  - The solution is likely to be a set of extended, or supplemental, satellite account that complement the core accounts and address policy questions and needs not met by existing statistics.