WORLD INEQUALITY LAB

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Foreign income and assets in comparative perspective: highlights from the World Inequality Database

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Overview

Who are the world's main foreign assets holders today? And who benefits from income transfers between countries? Public policy debates in high-income countries are increasingly focusing on the appropriation of national wealth by foreign investors and on the profit-shifting strategies of multinational firms. Yet, due to the unavailability of harmonized data sources, global perspectives on these phenomena remain rare. This issue brief exploits estimates available from the World Inequality Database to document international patterns of income transfers and foreign assets ownerships.

Due to important differences in returns from foreign holdings, net foreign income positions (income received from abroad minus income paid to foreign countries) and net foreign asset positions (assets owned abroad minus domestic assets held by foreigners) reveal very different pictures. In spite of the United States owing the equivalent of 10% of global income to the rest of world today, US adult citizens receive on average €750 per year from abroad. The situation is the opposite in China: while the world's biggest developing economy has been accumulating reserves sufficient to buy the entire wealth of Denmark and the Czech Republic combined, its net foreign income position remains significantly negative.

WORLD INEQUALITY DATABASE
THE GLOBAL DATA SOURCE

Introduction

In recent years, China's accumulation of foreign assets throughout the world has been the subject of increasing public attention. In the United States, many observers have been concerned with China's continuous acquisitions of US Treasury Bonds and domestic companies. In France, the media have repeatedly documented the purchase of historical Bordeaux vineyards by Chinese investors.[1] China's active foreign investment strategies did also have an impact in Africa, in particular regarding the extraction of natural resources.

These dynamics call for a more precise analysis of international transfers. Is the 'expansionism' of developing countries, and in particular China, as important as it is often portrayed to be? And which countries benefit most from foreign income flows today?

What are foreign assets and foreign incomes?

Understanding the dynamics of international transfers requires distinguishing between foreign wealth ownership and income transfers (understood as all types of cross-country income flows) between countries. Net foreign assets (NFA) are defined as the difference between the gross foreign assets and the gross foreign liabilities of the national economy. Gross foreign assets can be industries owned by a country but located in another, or foreign government bonds. Foreign assets are thus a component of a country's total net wealth, along with domestic financial and non-financial assets.

The accumulation of net foreign assets is linked to a country's current account, which adds up all transactions with the rest of the world – imports and exports of goods and services, returns from foreign investments by domestic companies and payments to foreign holders, as well as other transfers such as remittances or foreign aids. A nation with a positive current account will accumulate net foreign assets; a country with a current account deficit, on the contrary, is a net borrower from the rest of the world.

Net foreign incomes (NFI) are net incomes received from abroad. They enter in the definition of a country's national income (NI), along with gross domestic product (GDP) and consumption of fixed capital (CFC):

$$\text{NI} = \text{GDP} + \text{NFI} - \text{CFC}$$

In national accounts, NFI are the sum of net property incomes received from abroad (property income received minus property income paid), and net compensations of employees received from abroad (compensations of employees received minus compensations paid to foreign countries). Therefore, net foreign incomes are a direct measure of the monetary transfers received from or paid to other nations across the world, which are key to properly capture countries' total revenues in a given year.

Net foreign incomes (NFI) are a key component of countries' economic resources, which are not included in GDP figures.

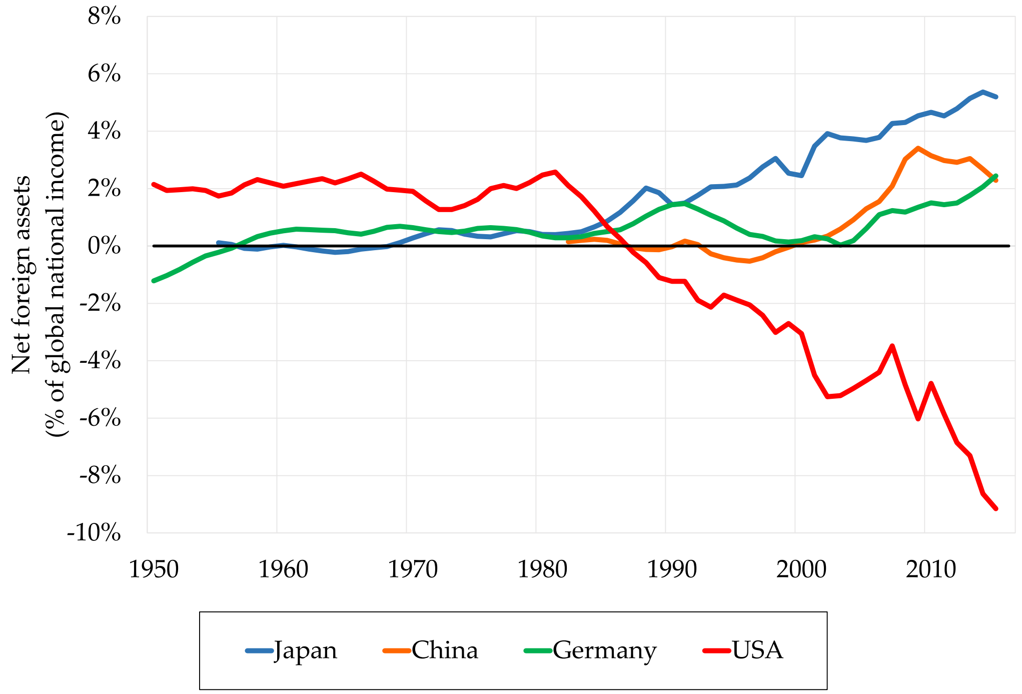
It is important to keep in mind that NFI and NFA are not always correlated. A country may own more foreign wealth than foreign countries own its domestic wealth (positive NFA), but may pay more income to the rest of the world than it receives income from it (negative NFI), because the rates of return on the assets it holds are much lower than the rates it has to pay back to reimburse its debts. Conversely, it may have negative NFA, but a positive NFI if many of its residents are working abroad and are being paid by foreign countries.

China is accumulating foreign wealth, but so are Japan and Germany in similar proportions

Data series available from the World Inequality Database (WID.world) show that China

[1] According to the local newspaper *Sud Ouest*, more than 120 properties in the Bordeaux region had been bought by Chinese investors at the end of 2016 (*Sud Ouest*, 28/11/2016).

Figure 1. Net foreign assets in China, Germany, Japan, and the United States as a share of global income, 1950-2016



Source: WID.world. *Key*: in 2015, after deducting foreign liabilities, both Germany and China held foreign assets worth about 2.5% of the world's total income. Figures are computed using 2016 market exchange rates values.

has indeed been accumulating net foreign wealth, especially since the 2000s (Figure 1). In the aftermath of the 2007-2008 financial crisis, China's foreign holdings were worth as much as 3% of the world's total income, or €1.5 trillion. This figure speaks for the economic power of the world's biggest emerging economy: if Chinese investors were to sell all their foreign assets, they would have enough money to buy the entire market-value national wealth of the Czech Republic and Denmark combined.

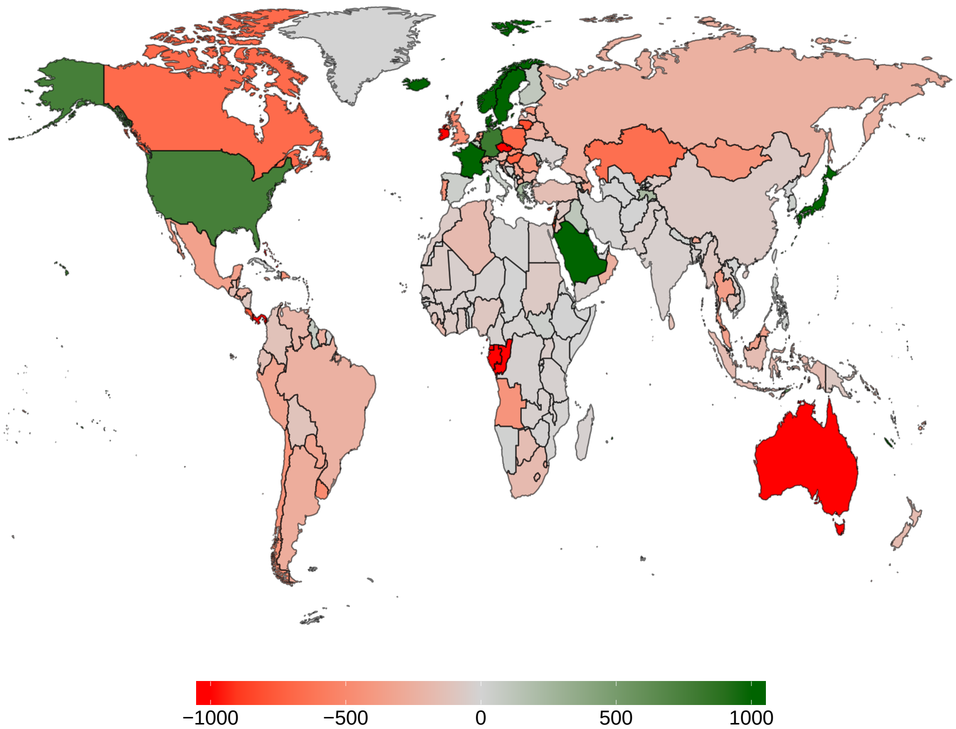
If China was to sell all its foreign assets, it could buy the entire national wealth of Denmark and the Czech Republic combined.

Yet, one should not forget that China represents more than one fifth of the global adult population. When comparing it to the world's other biggest creditors, China's foreign assets appear much less impressive. While Germany represented less than 1.5% of the world's population, its net foreign asset position was equal to that of China in 2015, and German foreign assets per adult were therefore more than ten times larger. The Japanese case is even more striking: since the mid-1980s, the country has been continuously accumulating foreign holdings, reaching a maximal level of about 5% of global national income today. Sizeable increases in Japan's and Germany net foreign positions can be mainly attributed to their large trade surpluses, which account for more than a quarter of their wealth accumulation during the past twenty years[2].

The United States, on the other hand, have shifted from being the world's largest creditor to the largest debtor. Until the 1980s, the USA held 2% of global national in-

[2] See Piketty & Zucman (2014) "Capital is Back: Wealth-Income Ratios in Rich Countries", *Quarterly Journal of Economics*.

Figure 2. Average net foreign income per adult across the world (2016 €)



Source: WID.world estimates. *Key*: on average, US adult citizens received €760 from abroad in 2016, at market exchange rates. Figures correspond to the last year available. For an interactive view with updated series, click here.

come in foreign assets; they now owe more than five trillion euros to the rest of the world, a figure equivalent to the total national wealth of Russia. This evolution is mainly the result of trade imbalances, in particular with China, which have generated current account deficits as the country had to borrow from the rest of the world to finance its domestic consumption. The fact that US Treasury notes – fixed-income investments issued by the US Treasury Department and guaranteed by the federal government – are considered to be the safest investment in the world has allowed this situation to perpetuate for the past thirty years[3].

[3]See Kenneth Rogoff (2007), "Foreign holdings of US Debt: is our economy vulnerable?", June 26 2007, Brookings Institution; Kimberly Amadeo (2018), "The US Current Account Deficit – Threat or Way of Life?", April 13 2018, thebalance.com.

Foreign transfers still benefit the world's most developed economies

While NFA figures show that China has gradually become an important actor of foreign wealth accumulation, net foreign incomes tell a very different story. In 2016, Chinese net foreign incomes were actually negative: adult citizens in China had to pay on average €150 each to the rest of the world. Imbalances in China's current account are the direct result of important compositional differences between its gross assets and liabilities. Chinese foreign assets mainly consist in US government bonds characterized by low average re-

> ***Only a small number of high-income countries benefited from positive net foreign incomes in recent years.***

Foreign incomes and foreign assets in WID.world

National income (NI) is a better concept than Gross domestic product (GDP) to monitor the long-run evolutions of global economic inequalities, as it accounts for net foreign income flows (NFI) and capital depreciation. Yet, comparable NFI series are typically not available for many countries and periods of time from a single statistical institute. In the World Inequality Database, the World Inequality Lab seeks to solve this problem by collecting all existing data sources. Raw NFI series come from the United Nations' Systems of National Accounts' main aggregates (UN SNA), the International Monetary Fund's Balance of Payments statistics, and data provided by Piketty & Zucman (2014) and other WID.world fellows. We then allocated global property missing income to countries or geographical regions on the basis of their share of global offshore financial wealth, based on estimates by Zucman (2014). This enabled us to approximate the levels and evolutions of net foreign incomes in all countries around the world from 1950 to today.

Net foreign assets are also extremely useful to apprehend historical and political dimensions of global wealth inequality. Yet, estimates of country-level foreign ownerships remain particularly rare. In the World Inequality Database, estimates of foreign assets and liabilities are based on Piketty and Zucman (2014) as well as on other country-specific studies. As WID.world fellows produce new results, the database will be regularly updated, making richer comparisons possible.

Learn more about the measurement of net foreign incomes and assets

- "National Accounts Series Methodology", by Thomas Blanchet and Lucas Chancel (2016).
- "Capital is Back: Wealth-Income Ratios in Rich Countries", by Thomas Piketty and Gabriel Zucman (2014).
- "From Communism to Capitalism: Private versus Public Property and Inequality in China and Russia", by Filip Novokmet, Li Yang and Gabriel Zucman (2017).
- "Taxing across Borders: Tracking Personal Wealth and Corporate Profits", by Gabriel Zucman (2014).

turns. Meanwhile, its liabilities arise from highly profitable foreign direct investments (FDI) which generate important income flows oriented towards developed economies[4].

According to estimates from the World Inequality Database, only a small number of rich countries benefited from positive foreign income flows in recent years (Figure 2), to the detriment of all other countries, which pay more income to the rest of the world than they receive from it. In contrast with China, Japan's external assets have been associated with very high revenues: in 2016, on average, every adult citizen in the country received nearly 1500 euros from positive NFI. A restricted number of high-income countries have equally profited from returns on foreign investments: France, Germany, and Scandinavian and Gulf countries are among the only economies characterized by annual net foreign incomes per adult higher than €1000.

The United States' positive NFI (€760 per adult in 2016) stands in sharp contrast with its negative NFA position. This paradox is the counterpart of China's situation: the USA have accumulated current account deficits, but have also steadily remained the largest investors of highly profitable assets in foreign countries, while foreigners have earned lower returns on their US holdings.

The Norwegian case, similarly, is illustrative of the country's investment strategy: following the development of oil and gas production in the late 1970s, Norway was able to gradually transform its negative NFI into a positive one by accumulating enormous foreign assets (€130 000 per adult compared to about €25 000 in Japan and Germany), via the Norwegian Oil Fund in par-

[4]See Yu Yongding (2017), "Imbalances in China's International Payments System", July 13 2017, Institute for New Economic Thinking.

ticular. Interestingly, Russia also benefits from substantial subsoil assets but has not accumulated large foreign assets over the past decades and has a negative NFI today. This can partly be explained by the rising share of offshore wealth.[5]

This analysis shows that it is necessary to have a closer look at countries' NFA and NFI positions in order to better understand who are the primary beneficiaries of between-country income transfers today. In particular, while China has been accumulating large NFAs, it it striking to see that it still pays more money to the rest of the world than it receives from it.

Why foreign income flows are key to truly capture residents' earnings: the case of Ireland and Luxembourg

To what extent are NFIs important to measure national citizens' standards of living and compare them across countries? Luxembourg and Ireland are two interesting examples of how GDP figures can be very misleading representations of citizens' standard of living. Both countries have developed a number of fiscal advantages for large companies in order to attract foreign investors, and their gross domestic products have remained among the highest in the Eurozone in the past twenty years. In 2016, the Luxembourg's GDP per adult was the second highest in the world behind Qatar, reaching €71,000 at market exchange rates, while the Irish gross domestic product per adult was €57,000, more than 25% higher than Germany's. If one was to use these figures as a measure of economic prosperity, these two countries would therefore rank at the top of the European distribution. Accounting for foreign income flows completely changes this picture.

In Ireland, net foreign incomes have fluctuated between -15% and -25% of GDP in the past ten years. After accounting for both net foreign income and consumption of fixed capital, the Irish net national income per adult in 2016 is reduced to €36,000, which is lower than Germany's NI by about €1,000. The Luxembourg's net foreign income position was even more negative, amounting to more than 40% of its gross domestic product in 2016. The nation's apparent level of affluence therefore disguised massive transfers to foreign countries linked to foreign companies' profit-shifting strategies. As a result, the Luxembourg's net national income per adult was only €32,000 in 2016.

The Luxembourg's national income is more than 40% lower than its GDP, mainly due to massive income outflows towards foreign countries.

Foreign transfers are also important to understand income dynamics within countries. The Luxembourg's NFI decreased massively in the past twenty years, from -10% of GDP in 1999 to -42% in 2016. As a result, the country's recent growth trajectory can be interpreted very differently depending on whether one looks at GDP or NI. Between 2000 and 2016, the average GDP per adult increased from about €80,000 to €82,000, while the average NI per adult dropped sharply from €60,000 to €38,000. Together with the fact that economic growth is often unequally distributed across the population, foreign transfers can therefore help us understand why citizens' perceptions are sometimes different from what official GDP figures suggest. Such differences directly motivate the use of NIs rather than GDPs in the World Inequality Report 2018 and on WID.world more generally.

Towards distributional approaches to foreign income and wealth flows

China's accumulation of foreign assets across the world, in particular in Africa, has nurtured the idea that the country is becoming a 'neo-colonial' power. Existing data series confirm the rise in China's net foreign assets position. Yet, figures from the World Inequality Database also suggest that reality is more complex. Japan's adult population is ten times smaller than that of

[5] See Alvaredo et al. (2018), Alvaredo, F., Chancel, L., Piketty, T., Saez, E., Zucman, G., "World Inequality Report 2018", June 2018, Harvard University Press.

Visualize WID.world data interactively and download available series

- Total net foreign assets across the world.
- Average net foreign assets per adult across the world.
- Total net foreign income across the world.
- Average net foreign income per adult across the world.
- Average net foreign income per adult in the USA, China and Japan, 1913-2016.
- Average net foreign income in the United Kingdom, 1855-2016.
- Net foreign assets and net foreign income in China, 1950-2016

China, but the island's total foreign holdings are more than two times larger, and its inhabitants receive substantial income flows from abroad.

Country-level data on foreign income and wealth flows are an invaluable source of information to understand global economic inequality. There is a need, however, to go beyond this simple picture. As consistent estimates of bilateral transfers will become available, it will be possible to apprehend better who are the winners and losers of foreign wealth accumulation. Measuring more precisely who are the beneficiaries of revenues from abroad *within* countries would also be useful to capture the distributional consequences of international flows.

The World Inequality Lab

The World Inequality Lab aims to promote research on global inequality dynamics. Its core mission is to maintain and expand the World Inequality Database. It also produces inequality reports and working papers addressing substantive and methodological issues. The Lab regroups about twenty research fellows, research assistants and project officers based at the Paris School of Economics. It is supervised by an executive committee composed of 5 co-directors. The World Inequality Lab works in close coordination with the large international network (over one hundred researchers covering nearly seventy countries) contributing to the database.

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