Dimensions of Income Inequality: The Role of Finance and the Measurement of Well-Being

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The Role of Finance

The dramatic growth of top income shares observed in the past decade has been attributed to several causes in the literature. Stiglitz (2015) points out that drivers of inequality from under the surface "a mass of market-structuring forces that determine the economic and political balance of power and create winners and losers." Our research distinguished two major contributing factors to rising (top) inequality:

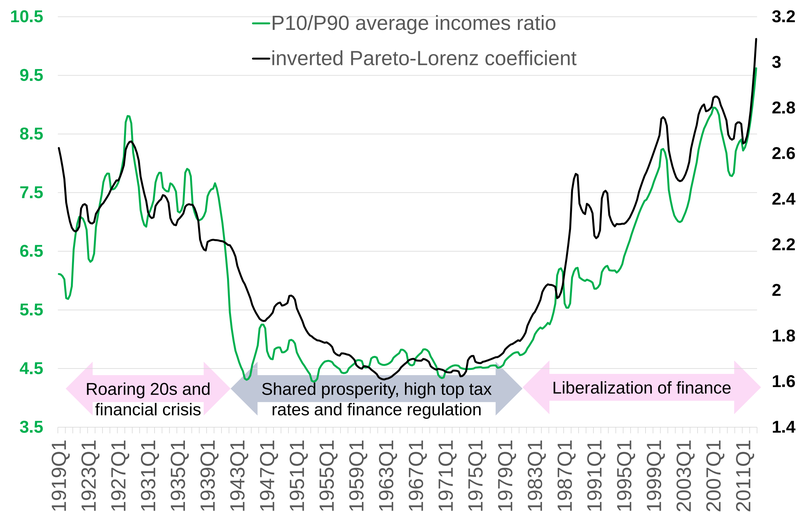
– Market Financialization and Deregulation Policy

– The growth of the financial sector and the shareholder revolution that led to changes in CEO pay.

Findings

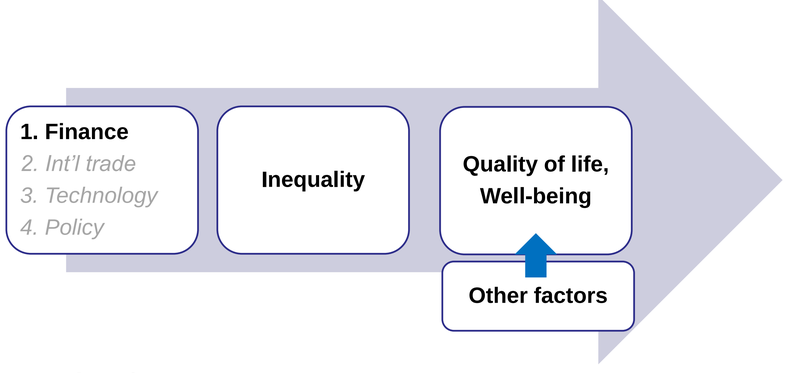
Workers in finance earn the same education-adjusted wages as other workers until 1990, but by 2005 the premium is 50%. Average wages of top decile earners in finance grew 80% more than top decile earners elsewhere, and executives in finance earn 250% more than executives elsewhere. Regression calculations suggest that the concentration of financial sector employees at the upper end of the earnings distribution and sizeable wage premiums for financial sector workers explain between half and two-thirds of the overall rise in income equality.

Assessing the various changes during the shareholder revolution revealed that intervention in the form of accounting rules, securities laws, broad tax policies, and changes in the CEO payment type all increased inequality. There is a very strong correlation between the level of corporate employment concentration — the proportion of the labor force employed by the 10 or 25 or 100 largest businesses — and income inequality. The frequency of stock option grants gained ground in the 1980s, and then surged in the 1990s and 200s, mainly due to the exceptions in Section 162(m).



Research questions:

1. How does the financial sector contribute to inequality?
2. How do economists measure well-being?



Methods

Multi-dimensional: Narrative, historical record, statistic and econometric analysis.

Well-Being Measurements

Traditional methods to measure well-being rely mainly on economic resources –monetary and material consumption. This approach has several drawbacks, including but not limited to: individual differences in happiness obtained by resources, lack of market for certain resources, and well-being factors not measurable by imputed price or not considered as resource. Following the Stiglitz-Sen-Fitoussi (2010) Commission on the Measurement of Economic Performance and Social Progress, we surveyed literature for recent improvements in measurements of Quality of Life. The current state of research highlights:

Quality of Life:
Surveys have been conducted to measure *subjective* well-being indicators, with big improvements. Aggregated measures have been developed and/or updated: World Happiness Index, OECD Better Life index, HD Index, Where-to-be-born Index, Social Progress Index. However, there is still a need for a universal measurement.

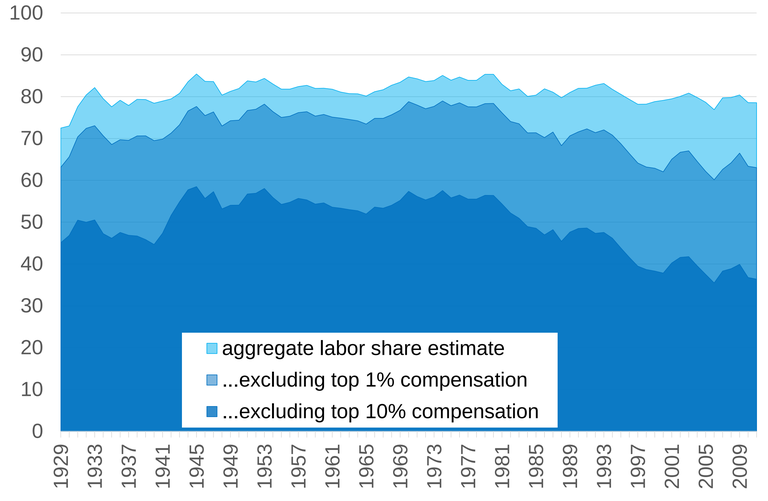
Measuring sustainability:
Focusing on the "wealth" and "stock" approach to sustainability means that future generations' well-being depends on the resources that are left to them. This includes quality of the physical capital, the expenditure on education for human capital, and improving social cohesion and trust.

Human capital: two ways increasing education

1. If the average level of education attainment increases
2. If the number of adults increases (with constant average level of education)

Human capital: increase in life expectancy to measure health
An increase in the value of health is tied to the value people attach to an additional year of life (Arrow et al. 2012). As investment in human capital and the growth of an economy prove crucial for increases in per capita wealth for countries. With the increased exposures to pesticides, heavy metals, and the like, there is an increased threat to health (McMichael 2005).

Social cohesion is "the capacity of societies to peacefully manage collective action problems" (World Development Report 2013). Social cohesion is said to have three domains: political, economic, and socio-cultural. It is important to remember that just as physical and human capital fluctuates, social capital may do so as well. In the long run, an increase in social capital and social cohesion may yield a decrease in inequality (Bijl 2011).



Connecting the personal and functional distributions of income

Economists have long distinguished between two dimensions of income inequality: the division of income among recipients (inequality among individuals) and the division of income among different types of incomes (differences between labor and non-labor incomes). In this section we report some preliminary findings indicating that the two types of income distribution could be related, in the same way that heads and tails are the two sides of the same coin.

From a literature perspective, inequality (personal distribution) is usually explained as stemming from four causes: financialization, international trade, changes in technology, changes in policy (see arrow chart). But the same forces are isolated in the older, almost forgotten literature on the functional distribution of income (see e.g. Stockhammer 2012). Each "cause" explains at the same time the rise in inequality as well as the fall of the labor share.

Yet we know that most of inequality lays in the top of the distribution pulling apart, so that top incomes, and therefore financial incomes, can be held responsible for much of the rise in income inequality (see "role of finance). Mathematically,

$$Y = B_{90} + T_{10}$$

$$\Delta logY = \Delta \log(B_{90} + T_{10}) = \Delta \log\big(B_{90}(1 + T_{10}/B_{90})\big)$$

$$\Delta logY = \Delta logB_{90} + \Delta \log(1 + T_{10}/B_{90})$$

$$\Delta logY \approx \Delta logB_{90} + \Delta(T_{10}/B_{90})$$

Yet the 10-to-90% total income ratio is a good indicator of inequality (Palma 2014), so that

$$\Delta logB_{90} - \Delta \log Y \coloneqq \Delta log\alpha_{90} = -k\Delta \text{inequality}$$

So that α_{90}, the labor share of the bottom 90%, is proportional to the change in inequality. QED ■