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Income inequality: the aftermath of stock market liberalization in emerging markets

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Abstract

Early research has documented that the large-scale equity market liberalizations of the last decade led the subsequent rise in aggregate equity indices, investment booms, capital flows and economic growth. An important and unaddressed issue is the normative question of whether and how these reforms shifted the distribution of incomes in the aftermath of equity market liberalization. In careful empirical analysis, we find a pattern indicating that income share growth accrued almost wholly to the top quintile of the income distribution at the expense of a "middle class" that we define as the three middle quintiles of the income distribution. A surprising finding is that the lowest income share remained effectively unchanged in the event of liberalization. These patterns are robust to the inclusion of a wide variety of controls for global shocks, country-specific factors, and contemporaneously implemented privatization and stabilization policies.

Keywords: Income inequality; Stock market; Liberalization

1. Introduction

In the latter half of the 1980s and the early years of the 1990s, the governments of over two dozen sovereign nations began to implement a wave of major economic reforms, which included capital account liberalization, privatization and/or a host of stabilization policies. This large-scale experiment has fuelled an active academic and popular debate on the causes and consequences of these reforms, in part because the aftermath of such reforms is important to nations which, to date, are considering liberalizing reforms. Empirical evidence on the consequences of these reforms will therefore be an important

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tool in assessing how best to implement similar liberalization policies in reform-minded countries.

In this context, a nascent but important body of empirical research has begun to emerge, analyzing important questions such as the relation of capital account liberalization to (i) emerging market equity prices (e.g., Bekaert and Harvey, 2000a,b; Kim and Singal, 2000; Henry, 2000a; Froot et al., 2001), (ii) liquidity (Levine and Zervos, 1998), (iii) private investment (Levine and Zervos, 1998; Henry, 2000b; Bekaert and Harvey, 2000a,b), (iv) equity flows (Bekaert et al., 2002) (v) and economic growth (Bekaert et al., 2001). This literature has found strong evidence that suggests capital account liberalization is associated with higher equity prices, lower cost of capital, investment booms, greater capital flows and higher growth.

To date, an important but unaddressed question in this literature is the issue of whether and how these reforms have shifted the *distribution* of incomes in the reforming countries. This is an important area of research for several reasons. For example, the finding in Bekaert et al. (2001) that average economic growth increased after liberalization raises normative issues about the allocation of the generated wealth. One would presumably evaluate the success of liberalizing reforms differently when average growth uniformly raised incomes for all quantiles of the distribution, from a finding that the average growth post-liberalization was only influenced by gains to the upper tails of the income distribution. For many countries that are still considering capital account liberalization, it is important to evaluate the benefits of market liberalization such as investment booms relative to the potential downsides of such policy reforms, so that future reforms may be tailored to alleviate any negative fallout from undertaking such economic reforms.

This paper takes a step in this direction by presenting the first set of results on the association of capital account liberalization with income inequality. In this paper, we heuristically and empirically describe the dynamics of the shifts in income distributions in a sample of 11 countries that undertook extensive economic reforms between 1986 and 1995[1]. Prior to our discussion of the empirical work, we consider various mechanisms that link capital account liberalization to income inequality. We do not intend these mechanisms to be causal in either direction, but to provide a framework in which the finding of an empirical link between the two variables should not necessarily be discarded as spurious.

We analyze income distribution changes by comparing the size of three income shares before and after liberalization, conditional on a set of country-specific factors, and contemporaneous global shocks. We study the share of GDP held by the top quintile, the lowest quintile, and a group we will henceforth refer to as the *middle class*, which represents the sun of the three middle quintiles. Because we track the changes in income shares which plausibly respond slowly to economic reforms (relative to equity prices or the dividend yield), we analyze movements in the distribution over the "short run" which we take as the first 2–4 years beyond the year of the first liberalizing reform. This aspect of the analysis is discussed in more detail when we present our methodological framework and the construction of event windows. We focus mainly on capital account liberalization, but also control for other reforms such as privatization and stabilization policies that were

[1] Data for the remaining countries are noisy and sparse. Details of the data are given in Section 2 of the paper.