

## **The Labor Share During Financial Crises** **Ishac Diwan, March 2002**

This paper starts from two stylized facts (Diwan 2001): that the share of GDP that goes to the labor force (as opposed to that that goes to capital) falls precipitously during financial crisis and only recovers partially afterwards, and that these losses show high variability across countries and time. The paper does two things: it measures the losses experienced by labor during crisis more precisely, and it investigates how the variability of these losses is related to the underlying economic structure.

### **Storyline**

The focus on financial crisis is related to new concerns about the mobility of capital on inequality. As noted cogently by Rodrik (1998), the main difference with the earlier globalization period of the 1900 and the current one is that then, capital *and* labor were mobile, while now, financial capital is more mobile while labor is much less mobile. The logical implication is that the burden sharing of negative shocks between labor and capital would be unequal, with labor bearing the largest burden, since capital could threaten to flee unless it receives the international interest rate, plus a premium to compensate for risk. In this paper, I consider that financial crises are episodes of distributional fights, periods where there is intense bargaining over the share of macro losses that would be assigned to labor and capital. I show that generally, labor tends to bail out financial capital during crises period, justifying some aspects of the current malaise with globalization, and that the extent of the losses experienced by labor are connected with the way in which the economy is globalized.

### **Methodology**

The variable which I focus on as a measure of inequality is the share of GDP that goes to labor (the LS), specifically, the compensation paid to resident and non-resident households, from the UN's National Accounts. The variable is reported by most countries and is estimated on the basis of surveys of enterprises and government accounts.<sup>1</sup> The data set covers 135 countries, and extends from 1975 to the mid 1990s, but is very spotty after the early 1990s, and there seem to be a middle and high income bias, with data for African country in particular being less available.

I define a financial crisis as a year where the nominal exchange rate falls by more than 25 percent (defined in domestic currency to dollar. Given the limitations of the UN data-set, the data set provides a maximum of 278 observations of crises years, and 2042 observations of non-crises years. This represents 67 financial crises: 25 in Latin America, 15 in Africa, 4 in the Middle East, 7 in Asia, 16 in the OECD.

Most the work involves panel regressions of the LS, using yearly data, over the whole sample. I also estimate a Probit model whose results I use to correct for sample selection bias related to financial crises. I focus on three sets of explanatory variables: (i) policies: government spending and deficit, capital controls; (ii) financial: external debt, size of domestic liquid and illiquid claims; and (iii) economic: change in GDP, size of trade, size of the rural sector. I use several

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<sup>1</sup> The informal sector should in theory be included in the national accounts, however, as the data sources for this sector are scarce, it will in practice often not be so. And the earnings of self employed persons are not included -- their incomes are considered as accruing to capital. These two considerations present perhaps the most challenging limitations of our approach, since crises can often be associated with migration towards small scale "survival" agriculture and informality.

simple models where the bargaining power of labor is related to the occurrence of crisis, and where the size of the losses, during crisis, is connected to the explanatory variables.

## Main Results

1. Losses to labor are very high during financial crises: on average, the LS during crisis is 6 points below overall averages, once the effect of crisis is measured well (I control for variables that affect the probability of crisis). The LS tends to revert back to norm: it only 1 point below average 3 years after the beginning of a crisis. However, crises leave social scars: I find that the LS stays 1 point lower than the overall average for every year of crisis experienced in the past.
2. High levels of Trade reduce the occurrence of crises, and when they do occur, shield labor from large losses. But labor may still be attracted to protectionism – we find that low levels of Trade do raise the level of the LS over whole sample. But the gain over the whole sample is ten times smaller than the losses during crisis, when crisis do occur (which also happens more often under low trade).
3. An more closed Capital Account is good for the LS over the short term, although it also increases the chances of a crisis. The positive effect for labor of closing the capital account is much larger during crisis. This explains why while it is always useful to pre-commit to open capital (to ward off a crisis), it is also very difficult, if a crisis hit, to cling to old promises.
5. The role of Government Expenditure, Fiscal Deficits, and External Debt are quite differentiated. Debt is always bad for labor, leading to a smaller LS, to a higher probability of crisis, and to much deeper losses during crisis. However, it allows for larger Expenditures, which are always good for labor -- controlling for the size of the deficit. The behavior of the deficit is close to that of debt: a large deficit increases the probability of a crisis and leads to lower LS during crisis. However, on the sample as a whole, deficits are associated with slightly rising LS, (presumably because they get partially monetized).
5. The role of Money is important and complex. A large money supply and a large banking system tend to prevent crisis, probably because they allow to spread losses over a larger base. But once a crisis occurs, things get more complicated. Labor is hurt more when the amount of money and liquid assets in the system are high – those claims are presumably more difficult to expropriate. The opposite is found for less liquid savings (M2-M1): a large level of non-liquid assets (which are easier to expropriate) tends to boost the level of the LS during crisis.
6. The analysis does not say much about poverty and inequality. The correlation between the LS and Gini coefficients is only about 0.5 (across countries, 1990s). There is no evidence that financial crises predominantly hurt the poor, or increase inequality. As a counter-example, a recent of the Mexican crisis of 1994 shows that labor lost relative to capital, but with most of effect concentrated on high skills workers. Overall, inequality improved during the crisis! More generally, the underlying model of crisis that emerges from our results focuses on the formal sector, where wage cuts can lead to gains in the Government balance sheet: crisis are resolved when workers in the modern sector lose out sufficiently to allow for lower pressures on the budget (and the banking system). This happens directly when the Government reduces the wage bill in the civil service, or indirectly when falling private wages reduce the value of the public insurance on banks'. The effect on low skilled workers and the informal sector, which would not be internalized in the budget, are likely to operate mainly through the demand side.

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