Economic Systems 37 (2013) 449–461

Contents lists available at ScienceDirect

Economic Systems

journal homepage: www.elsevier.com/locate/ecosys

Sharing risk within and across countries: the role of labor market institutions

Anna Lo Prete [*]

University of Turin, Department of Economics and Statistics, Italy

ARTICLE INFO

Article history:
Received 13 April 2012
Received in revised form 14 February 2013
Accepted 16 February 2013

JEL classification:
E2
F4
G15

Keywords:
Risk sharing
Labor markets
Incomplete financial markets
Employment protection

ABSTRACT

This paper studies the effect of labor market institutions on within- and cross-country risk sharing, using a model of international trade in risky assets modified to include a subset of agents, labor-owners who do not access financial markets, and employment security provisions. Labor market, institutions, by promoting within-country risk-shifting arrangements between agents with or without, access to financial markets, reduce the fluctuations of non-tradable labor incomes and amplify the, fluctuations of capital incomes. Capital flows become more volatile across countries, and if the, configuration of labor markets differs across countries, capital-owners bear the burden of systematic, undiversifiable world aggregate uncertainty.

1. Introduction

This paper shows in theory that, when risks cannot be fully diversified on financial markets, labor market institutions meant to promote risk-shifting arrangements between agents with or without access to financial markets may affect the response of aggregate consumption and capital income flows to country-specific income shocks.

The analysis relates to studies from two different fields of the literature, namely labor economics and international economics. According to the social insurance approach to institutional analysis, while the introduction of labor market institutions may be hardly motivated in a frictionless economy

* Tel.: +39 011 6704981; fax: +39 011 6703895.
E-mail address: anna.loprete@unito.it.

0939-3625/$ – see front matter
http://dx.doi.org/10.1016/j.ecosys.2013.02.002

where workers can insure perfectly against labor income risk, institutional features such as employment protection legislation (Lazear, 1990; Bertola, 2004) and wage setting (Agell, 2002) may represent second-best instruments for sharing risk under incomplete financial markets. In labor economics, the effect of labor market institutions has been studied extensively in a closed economy framework, where shocks are idiosyncratic to individual workers or firms, from a comparative static perspective (see e.g. Devereux and Lockwood, 1991; Bean and Pissarides, 1993). Recent studies have also addressed the topic using new Keynesian settings with search and matching frictions to derive implications for business cycle fluctuations. For instance, Zanetti (2011) shows in a dynamic stochastic general equilibrium model that the volatility of output decreases in the strictness of employment protection legislation as well as employment and job flows, while the volatility of inflation increases as firms adjust to business cycle fluctuations through prices. From an open economy perspective, Bertocchi (2002) shows that the structure of labor markets affects the way within-country income distribution responds to globalization forces, and that the share of incomes that goes to labor is higher in countries with stronger trade unions.

This paper extends the labor economics studies mentioned above, which focus on the impact of institutions on workers' behavior and on the size of income shares, to consider the possibility that income shares change in response to shocks in ways that depend on labor market institutions. Developing an argument by Bertola and Drazen (1994), who suggested that labor market institutions may be relevant to capital income flows if they foster income redistribution across individuals who differ in their ability to access financial markets for consumption smoothing purposes, it shows how institutionally provided risk-shifting may actually work.

The analysis proposed is also linked to a recent literature in international economics that acknowledges the importance of within-country risk-sharing and limited participation in asset markets to help explain puzzling international evidence on the consumption-real exchange rate puzzle. Kocherlakota and Pistaferri (2007) show that when people cannot insure against individual shocks within country borders, the effect of these shocks influences the prices of international assets. Kollmann (2012) and Devereux et al. (2012) relate the consumption-real exchange rate anomaly to the presence of households that cannot access financial markets and hence consume all their current labor income. Differently from those studies, this paper explicitly models the mechanism whereby labor markets may affect macroeconomic outcomes when a country is hit by a country-level income shock, and relates within-country risk-reallocation to institutionally-related income distribution between agent types.

Bringing together insights from labor economics and international economics, the present work contributes to the existing literature by offering a stylized model to study the qualitative implications of labor market institutional frameworks on both within-country and cross-country risk sharing.

The theoretical framework is based on a model of international trade in risky assets modified to account for the existence of non-Ricardian consumers, identified as labor-owners, and for the presence of labor market institutions that reallocate risk between agent types.[1] The world economy lasts for two periods and consists of two countries, home and foreign, inhabited by two types of agents, capital-owners and labor-owners. Capital is free to move internationally, while labor is completely immobile across countries. Each country produces a single tradable good, which can either be consumed or invested, by using a constant returns to scale technology and faces second-period uncertainty in the form of an exogenous country-specific productivity shock. While capital-owners ("investors") can access financial markets to insure and smooth their consumption profile, international financial markets are imperfect, as labor-owners ("workers") cannot borrow or lend, and incomplete, as there exists no insurance against labor-income fluctuations. In this framework, the only assets traded are forward contracts on income earned by capital. The key elements of the income-insuring mechanism whereby labor market institutional features may shield otherwise uninsured labor incomes are illustrated by incorporating job security provisions in the form of adjustment costs into the model.

[1] In this framework, the existence of non-Ricardian (rule-of-thumb) agents who consume their whole current labor income is linked to the lack of access to international capital markets (as, for instance, in Kollmann, 2012). Of course, rule-of-thumb behavior can be interpreted in several ways as a consequence of myopia, ignorance of intertemporal trading opportunities, etc.