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Does economic integration stimulate capital mobility? An analysis of four regional economic communities in Africa☆

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ABSTRACT

It is well known that high levels of regional integration enable portfolio risk diversification and capital mobility. While there have been a number of empirical attempts to verify the presence of capital mobility using the Feldstein–Horioka (FH) approach, none of them to the best of our knowledge have explicitly examined capital mobility changes across regional economic groupings in Africa, analyzing sub-samples to compare effects of pre-versus post integration. Filling this gap in the literature, this paper analyzes how some major regional economic integration initiatives, such as SACU (South African Customs Union), UEMOA (West African Economic and Monetary Union), COMESA (Common Market for Eastern and Southern Africa) and ECOWAS (Economic Community of West African States)) have influenced capital mobility in their member countries. To estimate the investment and savings relationship, we use Pedroni's (2004) fully modified ordinary least squares (FMOLS) panel cointegration method, applying to a sample of 25 African countries for which annual data is available from 1960 to 2009. To assess robustness of our results, we also employ the fixed effects, random effects and Mark and Sul's (2003) dynamic OLS (DOLS) methods. Our findings suggest that international capital mobility has only slightly increased in the African countries due to these agreements.

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1. Introduction

It is well known that high levels of regional integration enable portfolio risk diversification and capital mobility. Capital mobility offers useful insights for single currency debates, tax policies on capital and saving, whether growth is constrained by domestic saving and for the crowding effects of fiscal deficits. If capital mobility is found to be high then it is probable that countries cannot pursue independent monetary policies. In the context of advanced countries, a number of studies show strong relationship between regional integration and capital mobility, including Molle (1990) and Pelkmans (1997). However, such studies have been lacking for the African countries, in spite of several initiatives towards regional economic integration involving them.

Notably, in May 1994, the African Economic Community (AEC) was established as an initiative to promote economic integration in Africa. The AEC was aimed at bringing in all existing regional economic groupings in Africa to eventually create a large single market for Africa, with the ultimate aim of creation of an economic union on the lines of the European Union (EU). COMESA (Common Market for Eastern and Southern Africa), ECOWAS (Economic Community of West African States), SADC (Southern African Development Community) and EAC (East African Community) form the major pillars of the AEC. In line with this objective, the Africa Free Trade Zone (AFTZ) was announced at the EAC-SADC-COMESA Summit on Wednesday October 22, 2008 by the heads of SADC, COMESA and EAC (consisting of 26 countries with a combined GDP of nearly US $624 billion). All this is expected to foster stronger integration among existing regional blocs in Africa and stimulate capital mobility.

The rationale for regional economic integration in developing countries is implicit. Asante (1997) argued that regional integration is a tool for industrial growth and development. Hoekman et al. (1998) and Mathews (2003) pointed out a number of benefits in pursuing integration: investment and output growth effects, reduced regulatory barriers, economies of scale and emergence of intra-industry trade. Mattoo and Fink (2002) argued that there could be regulatory gains from regional integration. They proposed the concept of an optimum harmonization area composed of the set of countries for which aggregate welfare would be maximized. Jenkins (2001) provides evidence from the Southern African region that poorer members catch up with (converge on) richer ones through the process of trade. Johnson (1995), Lyakurwa et al. (1997) and Foroutan and Prichett (1993) found that all the regional economic agreements in Africa have been less successful in achieving their objectives. Foroutan (1993) argued that a common reason for the failure of regional integration in Africa is that removal of trade barriers may cause the few industries to migrate to industrially more advanced countries; see also Page (2000).

This paper contributes to the existing literature on regional integration and capital mobility by analyzing the changes in savings–investment relationship affecting capital mobility across four regional economic communities (SACU,[1] UEMOA,[2] COMESA and ECOWAS) in Africa, and using sub-samples to compare effects of pre-versus post regional economic integration. The framework used to determine capital mobility in these regional economic communities is the Feldstein and Horioka (1980) puzzle. The empirical methodology utilized is the Pedroni's (2004) fully modified ordinary least squares (FMOLS) panel cointegration method. This method allows consistent and efficient estimation of cointegration vector and also addresses the problem of non-stationary regressors, as well as the problem of simultaneity biases. To assess robustness, we also employ the fixed effects (FE), random effects (RE) and Mark and Sul's (2003) dynamic OLS (DOLS) regressions and compare the results. These regressions are run on a sample of 25 African countries for which annual data is available from 1960 to 2009.

The remainder of the paper is structured as follows. Section 2 provides a brief review of the literature and its evolution. Section 3 presents the empirical results, focusing on how various regional economic integration initiatives have influenced capital mobility in Africa. Section 4 concludes the paper.

[1] SACU members are also members of the SADC. SADC's original members were the SACU members followed by Mauritius, Zimbabwe, and Madagascar. In 2008 Malawi, Mozambique, Tanzania, and Zambia joined, but Madagscar's membership has now been suspended due to political reasons.

[2] UEMOA (*Union Economique et Monétaire Ouest-Africaine*) is a customs union and currency union between the members of ECOWAS.