

**ESSAYS ON INVESTMENT AND GROWTH IN INFORMAL ECONOMY**



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## **Abstract**

The process of economic development includes the transformation of the ‘agrarian sector’ to the ‘modern sector’ as an important component of change. In the process, labour migrates from the agrarian to the modern sector in the expectation of earning higher wages. However, lack of capital as well as various forms of institutional and other constraints prevailing in developing economies often restrict the pervasiveness and depth of industrial activities leading to low employment creation in the modern sector. Consequently, jobs are few relative to supply and this leads to involuntary unemployment in the modern sector, in addition to surplus labour in the rural areas. Unlike developed economies, unemployed labour in developing economies generally cannot access functional unemployment benefit schemes. As a result, the excess labour in developing economies who do not find jobs in the ‘modern sector’ find employment opportunities in the large and sprawling ‘informal sector’ - essentially as part of urban and semi-urban activities, but no less in the rural areas also. Evidently, the informal sector constitutes a major portion of economic activities in developing economies. Indeed, the government directly, and via many agencies, undertakes crucial policy measures to facilitate the growth of the formal manufacturing and the service sectors, with sporadic interest in agriculture as well, and expects that the expansion of the informal sector will self-correct itself through interconnectedness of growing economic activities. Do the growth experiences of developing countries speak in favor of such possibilities? What are the theoretical characteristics that need to be accommodated in order to contemplate possible relations between investment and growth in the presence of informal sector or open unemployment? This dissertation theoretically

evaluates the effects of alternative investment programmes on sectoral return to capital, sectoral wage rates, output and employment composition, and growth in a developing economy consisting of a large informal sector in a general equilibrium framework. We have addressed the above issues in two theoretical models, one with full-employment and the other with a possibility of open unemployment in the long run.

In many developing countries, more than seventy per cent of the working population is employed in the informal sector. Theories of dual economy characterize the path of economic development from agrarian to urbanized society, where informal sector emerges as a sub-sector. However, only a limited amount of literature is available on theoretical explanation to the growth path of developing economies when capital accumulation takes place in the informal sector. In India, the size of the informal sector is huge both in terms of employment and value added. Ninety three per cent of the labour force in India including those in agriculture, is employed in the informal sector, which contributes to almost fifty per cent of total gross value added (GVA) according to statistical reports. Important variables within the informal sector like fixed assets, value added, employment, number of enterprises and wage of informal labour have increased between 1994-95 and 2010-11. Increase in the fixed assets, in particular, reflects investment in the informal sector. Of other issues of importance, for example, the wage gap between formal and informal sectors has decreased over a period of time and may have important implications for economic growth and investments. We have also analysed theoretically whether the wage gap would eventually close in the long run, and if yes, under what condition.

In the model with full-employment, we found that when investment goods are allocated to formal sector then the wage of labour across formal and informal sectors would equalize in the long run. Long run is the time period when return to capital converge across sectors. For convergence of return to capital across sectors, formal sector must be capital intensive. Importantly, increase in capital in the formal sector leads to wage gain of informal labour. Contrary to popular belief, investment in formal sector would benefit the informal labour in the long run.

Investors are more likely to invest in informal sector because this sector is not liable to pay taxes unlike the formal sector. Given this, investment goods may be allocated to the informal sector. If this happens, then the economy would continue to have structural features with wage differential across sectors and the formal-informal wage gap would continue to persist. Also, a major portion of the labour force would continue to work in the informal sector without any legal benefits. Equilibrium in capital market would be reached on its own in long run with persistence of wage gap.

In the model with unemployment (a dynamic Harris-Todaro model), investment in formal sector leads to full employment of labour and closure of wage gap in long run. Equilibrium in capital and labour markets is attained only when marginal productivity of formal sector is relatively elastic. Interestingly, we found that capital market reaches equilibrium after labour is fully-employed. It essentially means that full-employment of labour is a necessary condition for convergence of returns in long run.

When investment goods are allocated to rural sector, there is an unambiguous increase in growth and a decrease in unemployment. In this case, equilibrium in capital market is

attained on its own in the long run. However, unemployment and persistence of wage gap between formal-informal sectors becomes a permanent feature of the economy. So, from policy maker's perspective we suggest investment in the formal sector. But more importantly, investment goods must be allocated to the formal sector. Investment in rural sector leads to persistence of wage rigidities in the long run.

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