External Shocks and Adjustment Policies in the Kenyan Economy: A Computable General Equilibrium Analysis with Special Reference to the Agricultural Sector.

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Certification

I certify that the substance of this thesis has not already been submitted for any degree and is not currently being submitted for any other degree or qualification.

I certify that any help received in preparing this thesis, and all sources used, have been acknowledged in this thesis.

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Dedication

To my mother, Margaret Waitherero Karingi.

Abstract

This study is an attempt to explain the performance of the agricultural sector in Kenya by analysing the effects of the macro environment created by external shocks and the various policies that the Kenyan government may have used to address these shocks. A CGE model for the Kenyan economy is developed. The model is used to simulate two external shocks that affected Kenya in the 1970s as a result of the first oil-crisis and the coffee-boom and to evaluate the implications of actual and alternative economic policies in response to these external shocks, on the performance of the agricultural sector. The analyses of the terms of trade shocks indicate that the economy was quite vulnerable to external shocks. Results also indicated that the export boom contributed in a positive way towards ameliorating the negative effects that the Kenyan economy was facing as a result of the oil-price shock. However, contrary to expectations, rural households involved in agricultural production did not experience significantly larger increases in nominal incomes than their urban counterparts.

With regard to actual government policy effects on the outcome of the external shocks, it was found that a contractionary fiscal policy through higher indirect taxes not only had slightly higher negative effects on overall GDP, but their impact on employment and hence income distribution made them a poorer option to higher import tariffs if the government's main concern was to improve or at least maintain the level of households' welfare. The other finding was that government spending in a small economy like Kenya is an important determinant of the level of growth and hence welfare of the various household groups.

In regard to alternative policies, the analysis shows that if the government had decided to revalue the currency then the gains from the existing export boom would have been almost wiped out. But if the government had considered the export boom to be a transitory phenomenon and devalued the currency then the gains from the positive terms of trade shock would have been maximised. Moreover, the results indicate that an expansionary fiscal policy implemented through either lower import tariffs or indirect taxes accompanied with concomitant reductions in government spending would have reduced gains to the economy from the external shocks in the short term. Lower growth

in the economy and lower increases in nominal incomes of households would have occurred if government had pursued such a policy.

With an updated database, the model was used to investigate whether the economy was still vulnerable to external shocks in the 1980s. Results show that it was still sensitive to terms of trade shocks. However, unlike in the 1970s, the shocks experienced in the mid-1980s did not produce as large changes in the economy as in the 1970s. There is some evidence that changes in the structure of the economy may have influenced the magnitudes of the responses to the shocks.

Further, with the updated database, the model was used to analyse the policy recommendations made by the World Bank and IMF in the mid-1980s. On the issue of fiscal austerity measures, the results show that a fiscal austerity measure through higher indirect taxes rather than through lower government spending or higher direct taxes is a better option for the government. This is in terms of the effects of these policies on both macro variables and income distribution.

The results also showed that trade liberalisation would have positive effects on GDP in the short run but have negative effects on various other macro variables. Of the two options available to government to offset the duty revenue losses, an increase in foreign capital was better than increasing indirect taxes. Overall, the trade liberalisation measures show that households would have lost in nominal income terms in the short run. These losses would have been even larger if indirect taxes had to be increased to raise government revenue. However, the income losses when trade liberalisation is supported by foreign capital were very minimal.

On the issue of foreign borrowing, the economy appears to be very sensitive to any moves to reduce the net inflow of foreign capital. Such a policy would be much worse if there was an attempt to reduce government spending to implement it. However, the results show that it is possible for the economy to withstand declines in foreign capital inflows if the exchange rate were devalued. Export earnings from the devaluation more than proportionately offset effects of reduced foreign capital inflow.

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