

Macroeconomics, Agriculture, and Food Security

**A guide to policy-making
in developing countries**

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Outline

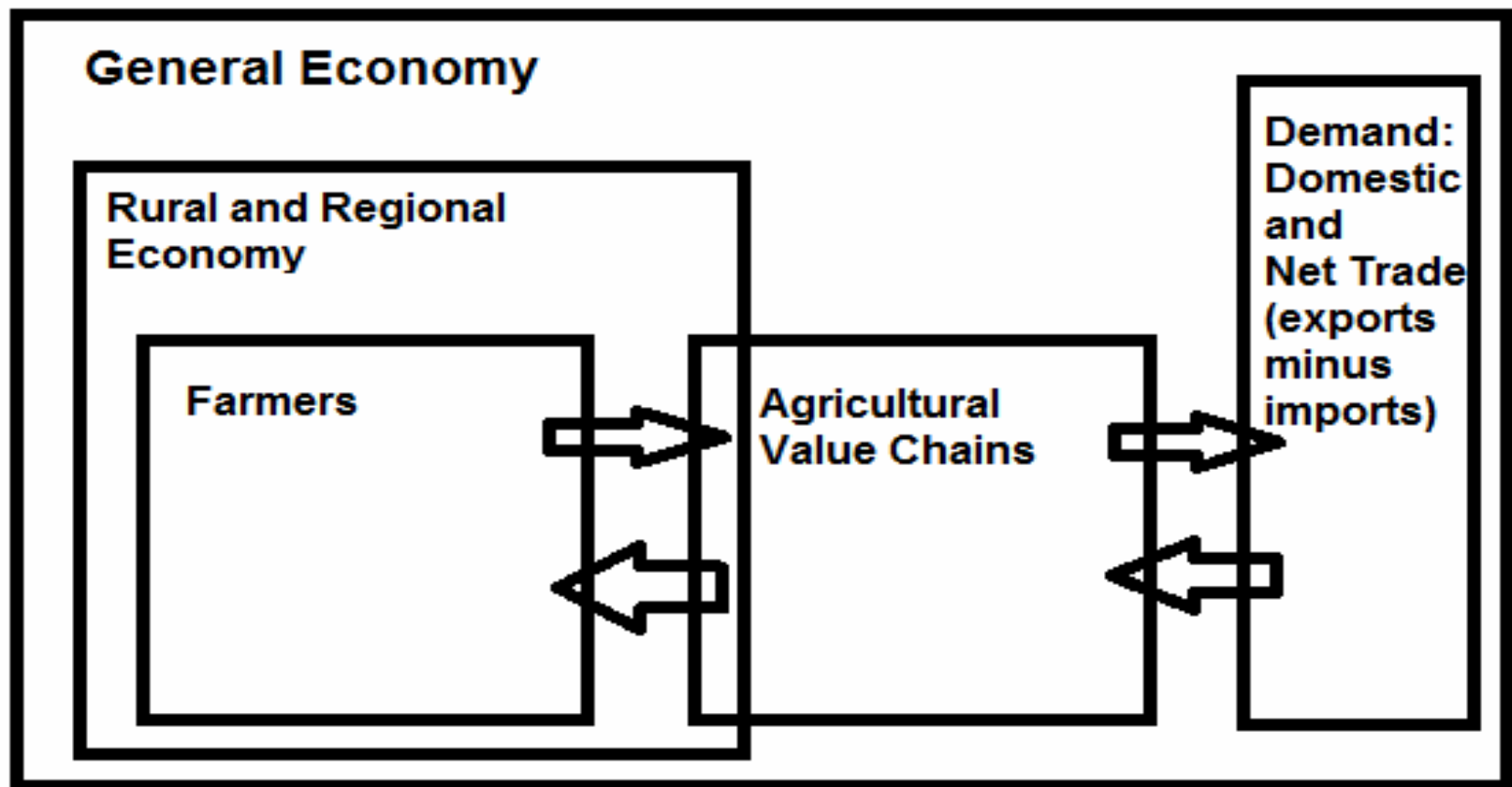
- **Purpose and approach of the book**
- **Some policy messages/examples**
 - **General**
 - **Fiscal, Monetary, Exchange Rate, and Trade Policies**
- **Final comments**

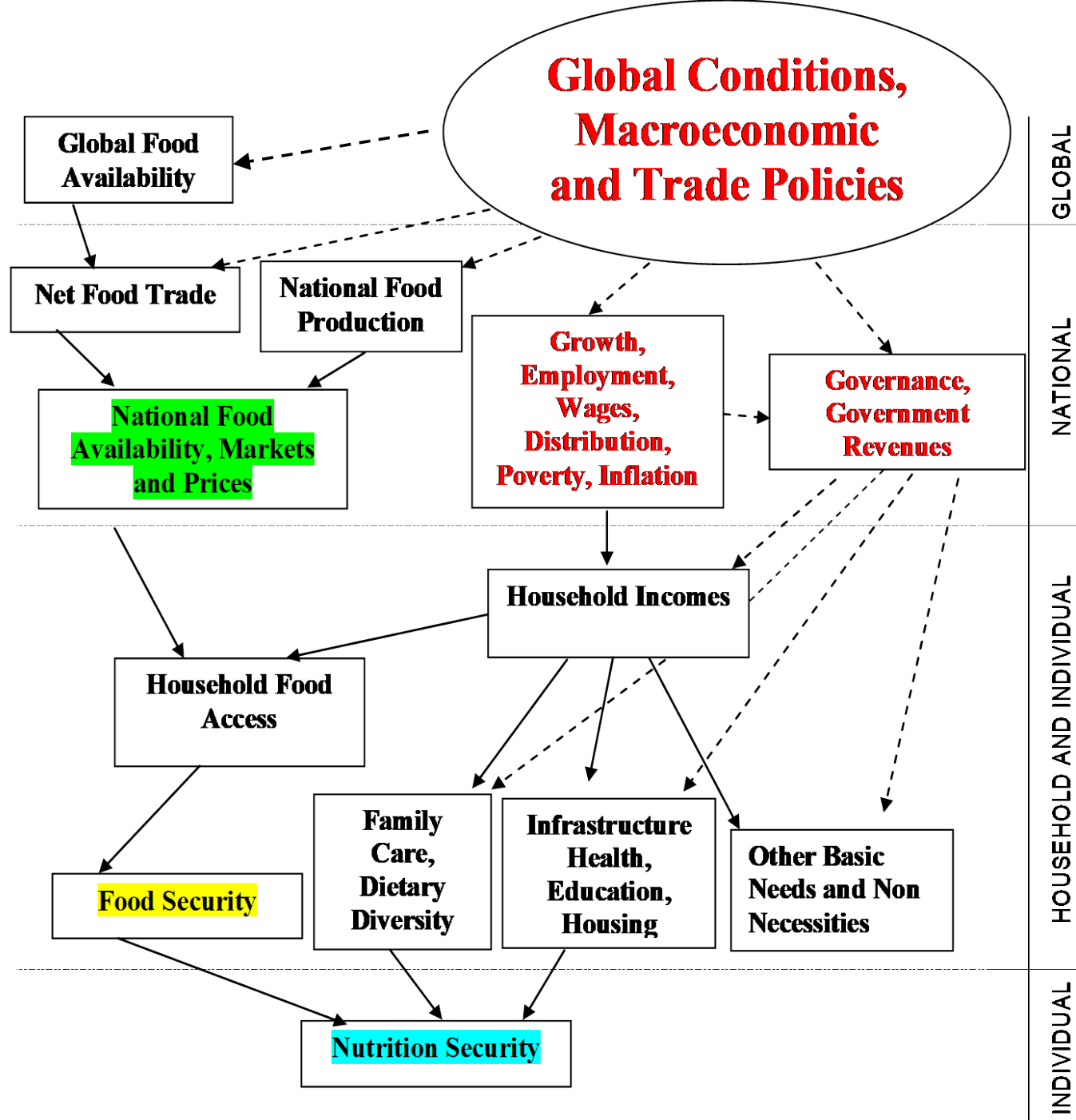
Purpose and approach 1

- **Practitioners in agriculture and food security, and practitioners in macroeconomics, in developing countries**
 - **Using a “consistency framework”**
 - **Macroeconomics: “accounting identities plus opinions” Four main accounts: national income and expenditures, balance of payments, fiscal, and monetary**
 - **1-2-3 model, Sherman Robinson et al.**
 - **Social Accounting Matrix**
 - **Economic crises and inconsistent/unsustainable policies that ignore those accounting identities**
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Purpose and approach 2

- Early approaches: RER and internal TOT ag/non ag. Book more general: Alignment and interaction of AD and AS. Macroprices. Crisis avoidance (or management). Distributive impacts



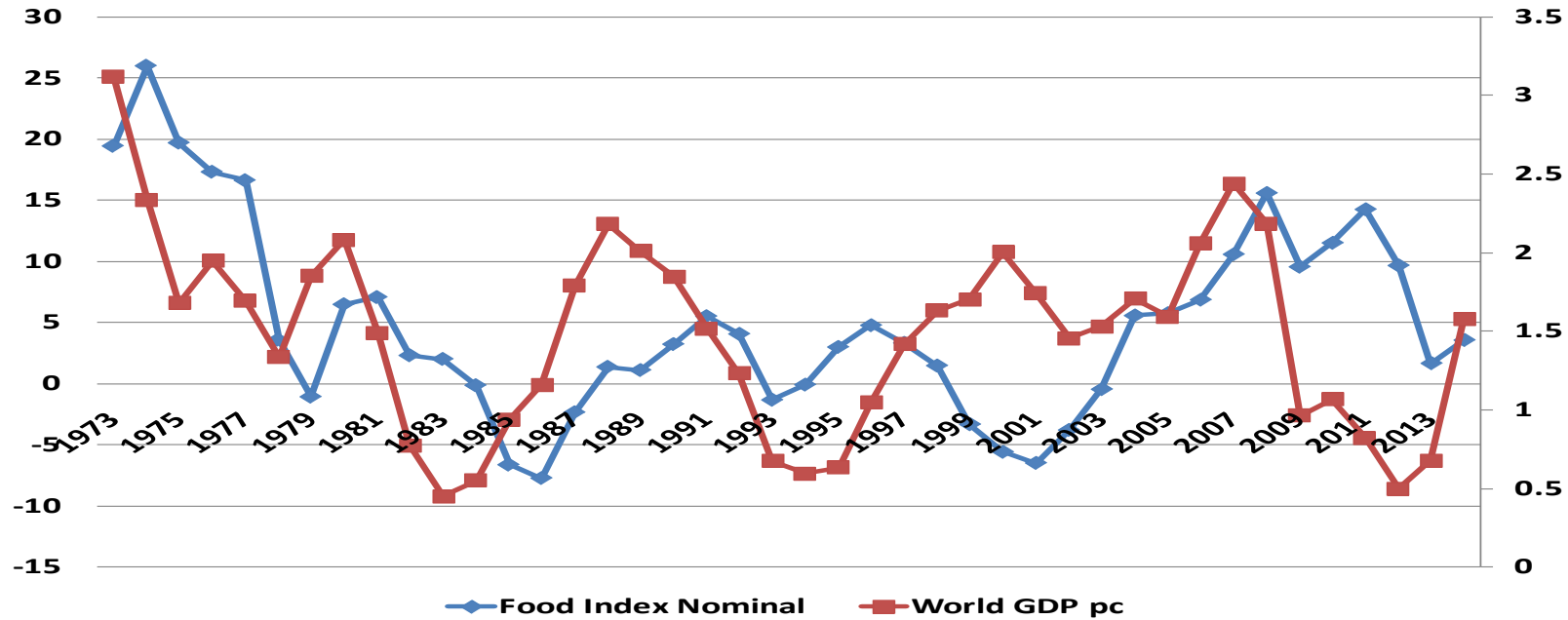


General messages 1

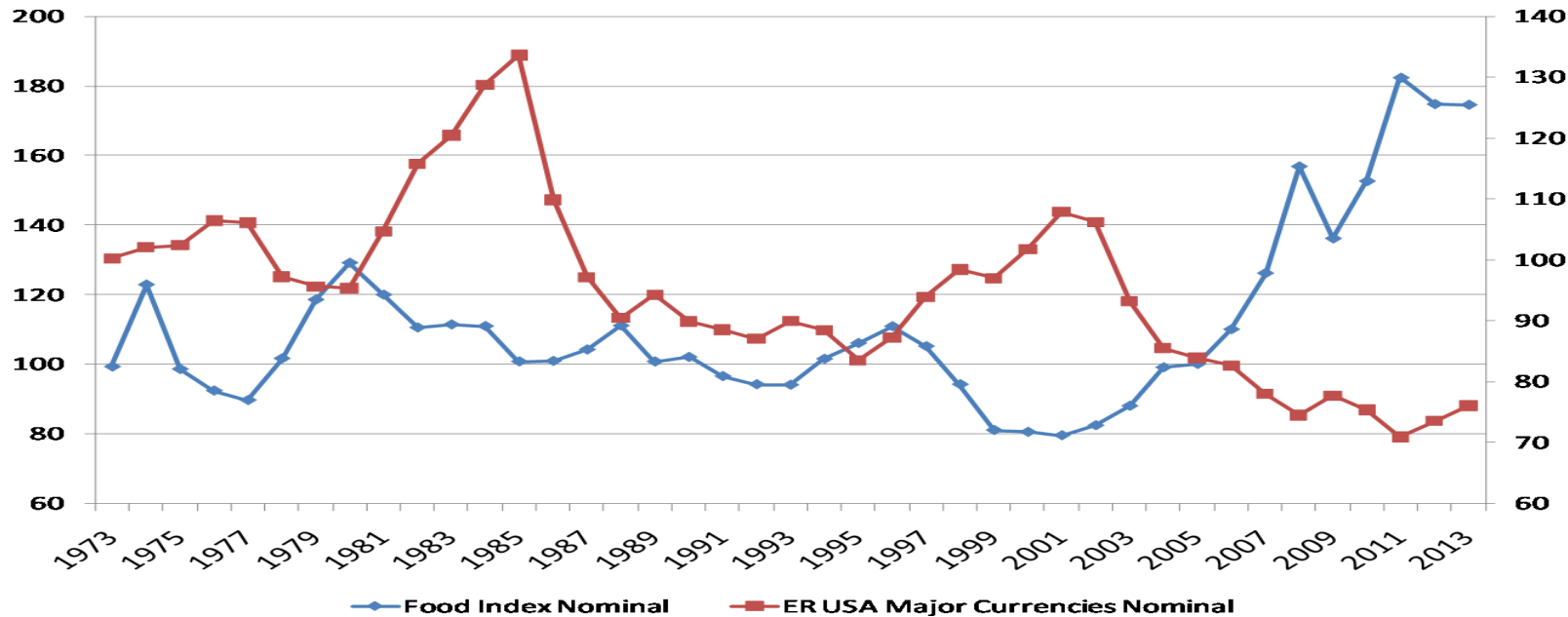
■ Impact of any macroeconomic policy depends on...

- **Conditions in world economy**
 - Growth, trade, interest rates, exchange rates of relevant currencies, capital flows, prices of commodities...
 - **Structure and conditions in national economy**
 - Productive structure, composition EX/IM, demographics, endowments, agrarian structure....
 - Book discusses some typologies of countries
 - **The whole economic program**
 - Fiscal or monetary policy with fixed/floating ER; trade liberalization with over/undervalued RER
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**Cycles in World Growth (right axis) and Food Price Inflation (left axis)
5 year averages**



Nominal Food Index and Nominal US Exchange Rate



General policy messages

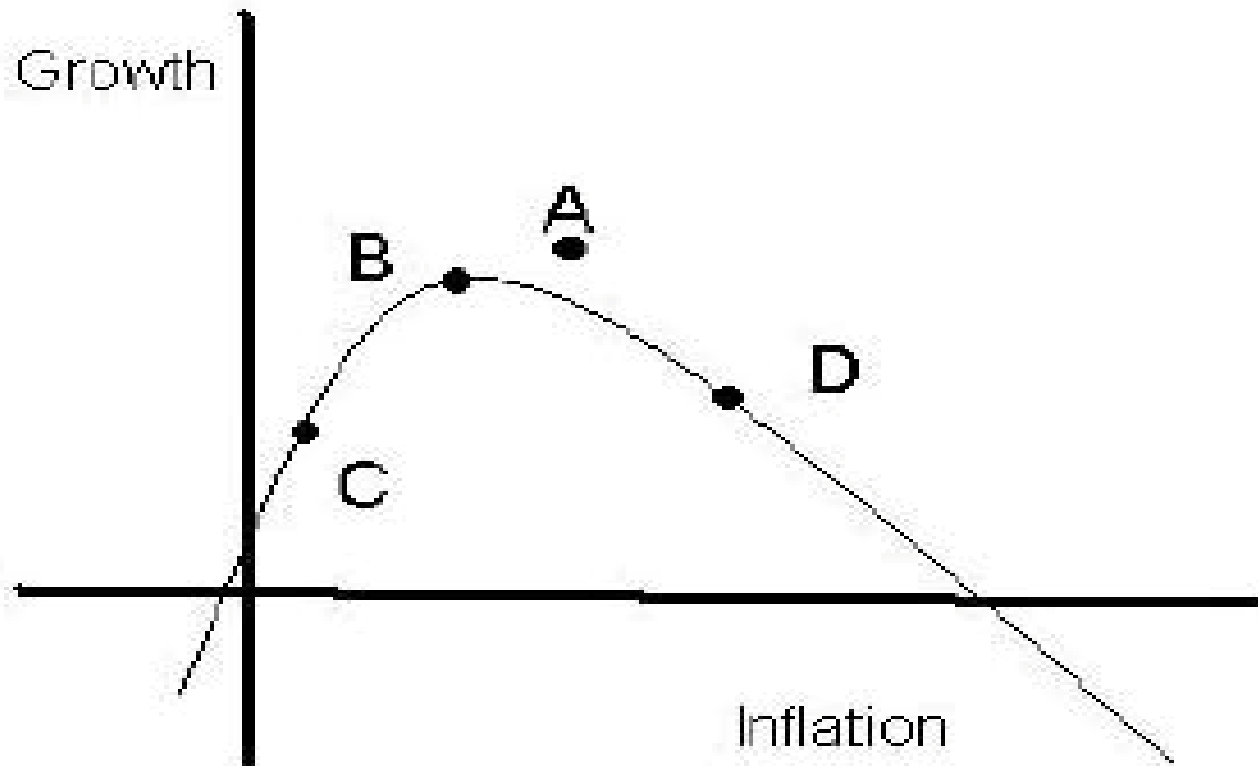
- **If there are multiple objectives, then multiple policy instruments are needed (Tinbergen, 1952.)**
 - Food policy dilemma: “high” prices for producers and “low” for consumers (Timmer, Falcon, and Pearson, 1983)
- **Align policy instruments to the basic problem or objective (Bhagwati, 1971).**
 - Food security: crops or individuals?
- **Understand distributive impacts**
 - Equity arguments and political viability

Fiscal issues

- **Consider general macroeconomic effects of agricultural programs with large fiscal impacts (consumer and producer subsidies, price stabilization)**
- **$G - T = dB + (dDCg - dBMg) + dFCg$.**
 - **Egypt 1980s: fiscal deficit caused by food subsidies was financed by money printing; led to increases in the rate of inflation, appreciation of the RER, trade deficits and ER rationing (Scobie, 1988).**
 - **Zambia: subsidies to maize moved from 1.2% GDP (2009) to 2.7% (2011). G rose from 22–23% to 25% of GDP; fiscal deficit increased 0.5-1% GDP. No displacement of other expenditures but increases in deficit (public debt)?**

Monetary and financial issues 1

- Different monetary frameworks: ER, monetary aggregates, inflation targeting, others



Monetary and financial issues 2

Credit to agricultural sector: instruments, institutions, and source of funds.

Table 9.10 Simplified version of flow of funds

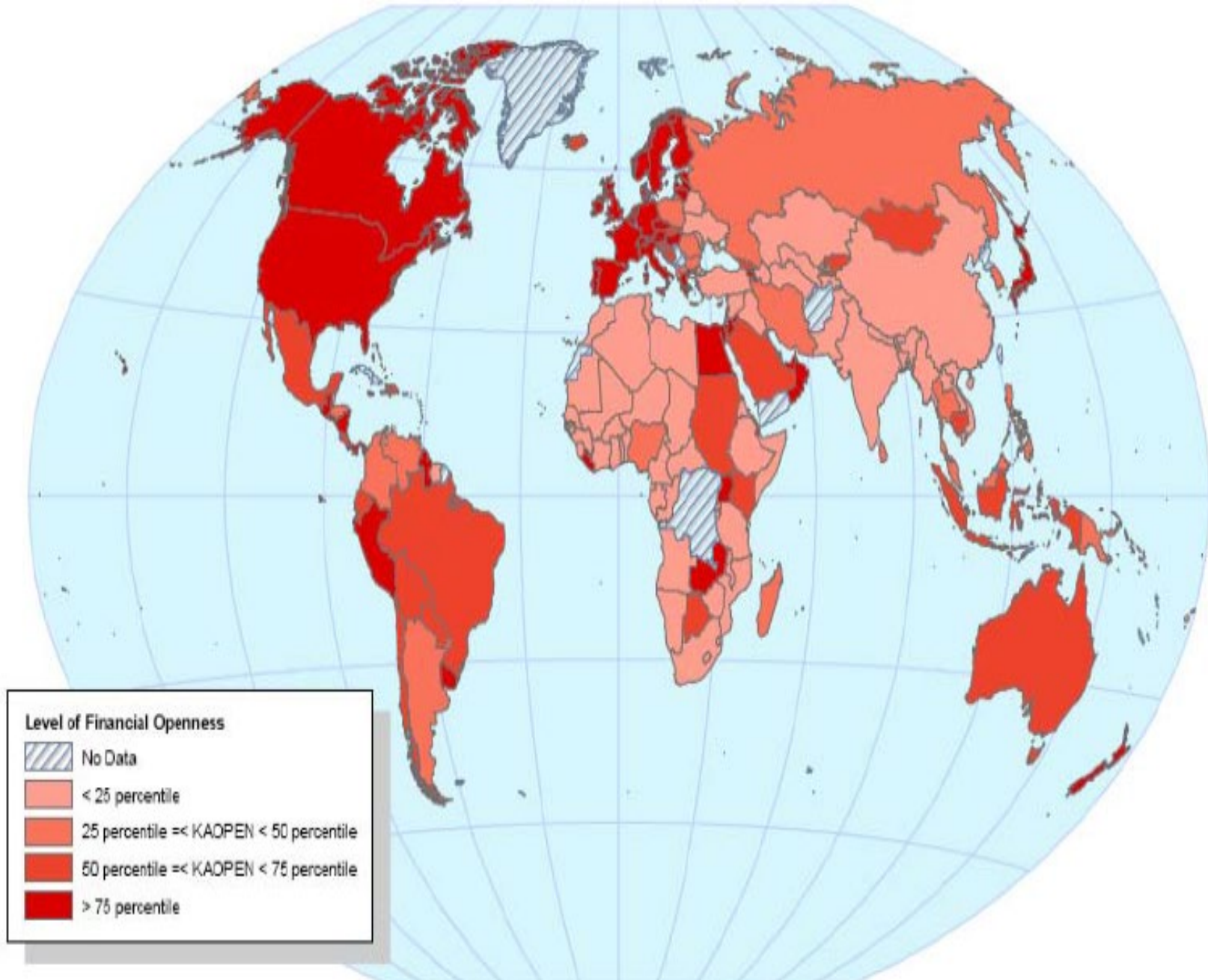
			Capital account (savings and investments)			
			Private sector	Government	Monetary sector	Rest world
			I_p	I_g		
Capital account	Private sector	$DEPR_p + S_p$			dDC_p	dFC_p
	Government	$DEPR_g + S_g$	dB		dDC_g	dFC_g
	Monetary sector	S_b	dB_{Mp}	dB_{Mg}		
	Rest world	S_{rw}			$dNFA$	

Exchange rate 1

- **ER affects short-run AD and longer term AS.**
 - **Equilibrium of flow demand/supply of foreign currencies or equilibrium demand/supply of stocks of various assets (depending on opening of K account of BOP)**
 - **Two approaches:**
 - **The “real exchange rate:” production, employment, trade. The “nominal anchor:” inflation, interest rates, capital flows, and asset accumulation.**
 - **Dual role and inconsistent economic programs (Corden, 1990). Two objectives (competitiveness and inflation) and one instrument, ER**
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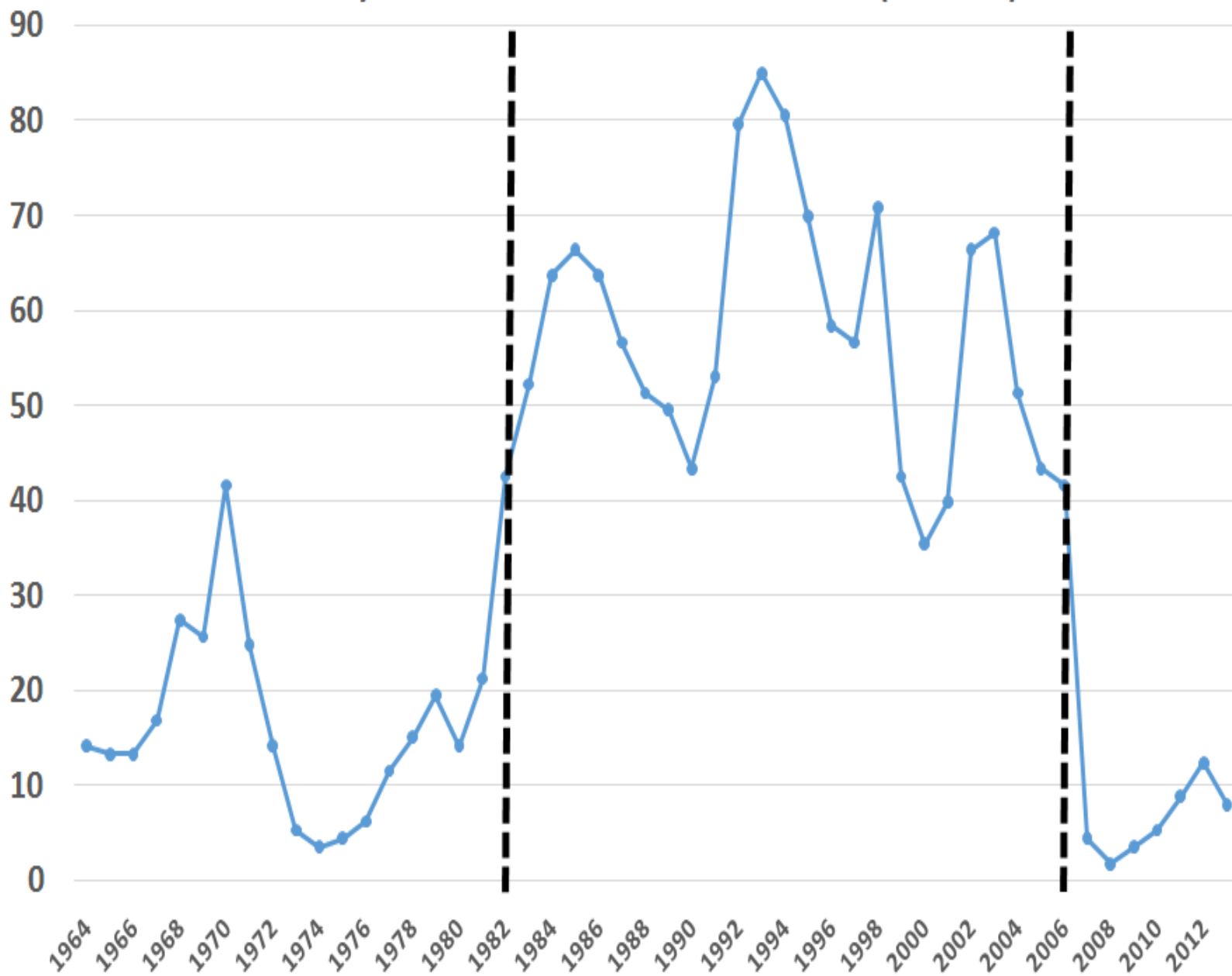
Exchange rate 2

- **Consider interaction monetary policy regime, ER, banking system, and financial flows.**
 - **Devaluation with/without capital controls (Honduras and Guatemala) and with/without dollarization (Kenya 15% of deposits, Zambia 43%)**
 - **Avoid overvaluation of RER**
 - **Corrections of overvaluations leading to economic and financial crises, increasing poverty and food insecurity**
 - **Ethiopia and 2008 price shocks: macroeconomic factors (inflation, ER appreciation, and rationing of ER) more determinant than world prices jumps.**
 - **Food price stabilization in Asia (sectoral policies) and LAC (a macroeconomic problem)**
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Chin and Ito (2007) A New Measure of Financial Openness

Percentage of Countries where 5 year volatility of ER is larger than volatility of the world nominal index of food (WB data)



Trade Policies

- **Trade deficits/lack of competitiveness: mostly macroeconomic issue; usually cannot be corrected by trade measures alone.**
 - **$GDP = C + G + I + EX - IM$**
 - **$GDP - (C + G + I) = GDP - A = EX - IM = (EX_a - IM_a) + (EX_{na} - IM_{na})$**
 - **Self-sufficiency: $IM_a = 0$; how does the accounting identity rebalance?**
 - **Several possible ways of balancing with impacts on GDP, A, EX_a , EX_{na} , or IM_{na}**
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Final comments

- **Know and understand your country, global context and data.**
 - **Consider the systemic impact (“general equilibrium” effects)**
 - **Reach your own conclusions (“opinions”), considering the Tinbergen and Bhagwati rules**
 - **Remember that national accounting identities cannot be ignored and that overvalued RERs usually end in systemic crises**
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- **I hope the book helps practitioners to analyze the crucial interactions between macroeconomic policies, agricultural development, and food security**

■ **Thanks.....**