

Trade and Informal Economy

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A Background-Informality

- During 1960s and 1970s it was considered that informal economy would shrink with growth.
- In 1990s and 2000's findings have reflected that globalization and trade reforms have not lead to withering of informal economy-on contrary evidences of expansion.
- How to measure this more accurately and what steps to be taken then?



The Concept of the Informal Economy

Definition: 15th ICLS resolution states that the informal sector is a sub-sector of the household sector. This is consistent with the current SNA and no change is proposed to this treatment.

Corporations sector	Household sector					
		Informal sector				
Quasi-corporate household enterprises	Unincorporated enterprises owned by households, engaged in farming	Unincorporated enterprises owned by households, engaged in non-farm production with fixed location	Unincorporated enterprises owned by households, engaged in non-farm production with non-fixed location	Households producing domestic services by employing paid domestic workers	Households producing owner-occupied housing services	Illegal activities

Source: Advisory Expert Group on National Accounts SNA/M2.04/12, New York, 8-16 December 2004



Definition

15th ICLS informal sector definition thus excludes illegal activities and agricultural production activities.

The ICLS defined informal employment as “employees considered to have informal jobs if their employment relationship is, in law or in practice, not subject to labour legislation, income taxation, social protection or entitlement to certain employment benefits (advance notice of dismissal, severances of pay, paid annual or sick leave, etc.)”.

Post 2003 -Self Employment: employers in informal enterprises, OWA, workers in informal enterprises, unpaid family workers and members of informal producers.

- Informal wage employment: employees without formal contracts, worker benefits or social protection employed by formal or informal enterprises/employers or by households.



Region wise Informality (%)

Informal employment	Latin America Carribean	Africa	Asia
Non-agricultural employment	57%	78%	45-85%
Urban employment	40%	61%	40-60%
New Jobs	83%	93%	NA

Source: Charmes 1998a (updated 2000).

N Comparison of GDP Employment and Output

Labour Ratios (India):1999-00 over 2004-05

Manufacturing	Growth 2004-05 over 1999-00 (Average per annum)
GDP Constant prices	
Registered	11.94
Unregistered	8.64
Labour	
Formal	-7.43
Informal	5.41
Output/Labour per annum	
Formal	34.96
Informal	2.44
Productivity Difference	14.32



Conceptualization Matters

Chaudhuri and Mukherjee (2002) state restructuring of employment and, informalization of production and employment is bound to increase wages in the informal economy due to reallocation of capital into this sector.

The authors argue that without capital mobility across sectors there can be no question of reallocation of production.

Note authors talk of the total wage bill and not of individual wages.

Empirical studies do not corroborate this.

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The Informal Economy – A Challenge

As of date, theories about the informal economy generally emanate out of micro-level and firm specific studies with little attempt made to build macro-level economy wide frameworks.

The economy-wide models based on a macro level data as developed in India and Benin could be taken on board to develop further the framework with which to incorporate trade issues into the model.

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Some evidences on Informal Economy and Trade

The issues around the informal economy and trade can be conceptualized either as trade influencing the degree of informality in the economy or as the degree of informality influencing the possibilities and the eventualities of gains from trade.

Goldberg and Pavcnik (2003) observes that with the opening up of trade there is a reallocation of production from the formal to the informal economy and the workers in the formal sector face threats of lay-offs and retrenchments

Employment shrinks in the formal sector and new employment gets created in the informal economy but wages in the formal sector rises while those in the informal economy falls.

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Informal Economy and Trade-Productivity

Cimoli's (2005) paper suggests that productivity gains in the formal sector do not translate into an overall productivity gain across the economy because of overall demand constraint. Therefore, whether the gains of the export sector would generate activities in the rest of the economy would depend on the trajectory and robustness of economic growth. Therefore, it is not trade per se that could be leading to information but rather the internal structure of the economies, degrees of specialization and the levels of skills therein.

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Informal Economy and Trade-Skill



- Haltiwanger et al (1996) observes that informality helps in trade provided job switches are possible from the informal to the formal sector with skill upgradation and new skills.
- Trade destroys jobs in both sectors and should be able to create new ones according to new demands.
 - This requires certain levels of education, opportunities for reskilling and soon.
- La Porta and Shlefer (2008) observe that the informal economy due to the small size of firms is less likely to find talent and hence economies with a predominance of such firms are not likely to specialize or become competitive and benefit trade.





Informal Economy and Trade-Size



Farell (2004) finds small sized firms grow less and hence in the long run cannot contribute to productivity growth.

Lewis (2004) corroborates this observation and adds that despite being low cost, the informal economy constitutes a drag on the economy due to its low productivity growth.

United Nations DESA (2005) study finds that inequality in incomes retard access to education and health and eventually blocks access to capital, skills, infrastructure and markets and hence depress trade.

Hall and Sobel (2008) say that the owners of the informal units face enormous hurdles in the form of regulations and this increases the transaction costs for these businesses.

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Some Conclusions - Informal Economy and Trade

Studies addressing the impact of trade on the informal economy suggest that capital mobility and formalization of credit and up-gradation of skill are crucial for the informal economy to benefit from trade;

Trade tends to expand the informal economy because firms need to cut costs of production and overheads

Informal economy is likely to remain unaffected by trade reforms if it is independent of and parallel to the formal sector.

Some Concerns-Informality and Trade

- Studies with impact on informality on the prospects of trade have raised concerns relating to the fact that informality itself exists due to income inequalities in the economies.
- Rising informality indicates rising inequality which in turn suggests adverse distributive structures in the economy are retarding the process of specialization and growth and hence trade.
- Trade needs to be sensitive to this possibility and needs to be better linked with credit and technology transfer.



Qualitative Approach

Several field level studies have analyzed impacts of policy changes in developing countries on poverty and inequality. Squire (1991) and Van der Hoeven (1996) have conducted reviews of the linkage between adjustment and poverty during the 80s. The findings of qualitative analysis between the relationship between reforms and poverty are presented in a short review by Killick (1995), and White (1997) provides a more review on this.

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Qualitative Approach

Such work describes methodically the reforms undertaken in a country and the changes in a variety of welfare indicators among different household and socio-economic groups. Studies have been also reported in a series of Background Papers on "Globalisation with Human Face" prepared for the Human Development Report 1999 (UNDP, 1999). Similarly Cornia (1999), Handa and King (1997), McCulloch, Baulch and Charel-Robson (2000) provide similar analyses for different African countries.

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Qualitative Approach

Glick and Roubaud (2004) present data on investigation of the impact of the establishment of export-processing zone on earnings, employment and the gender composition of employment as well as gender specific wage differentiation from 1995 and 2002 in Antananarivo, Madagascar.

The authors find that in the aftermath of globalization, the informal economy suffers a fall in the women's participation in the workforce, of self-employed and private informal workers of all persons and a drop in the number of firms in the informal economy.

At the same time there was a disproportionate rise the female workers in the Export Processing Zones. The formal sector outside the EPZ remained largely unaffected.

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Qualitative approach provides a very detailed understanding of the focus of the trade reforms, the exact implementation procedures and the changes experienced by the group in which the researchers are interested can be obtained

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Some Disadvantages

This approach for example cannot identify the exact linkage between, trade or fiscal reforms and the welfare changes, as these cannot be tested.

The result seen after a policy change could be due to other reasons or mixed outcomes and no direct linkage can be traced without any quantitative connection.

No impact observed after a policy change could be due to some countering factors, though policy changes have had a direct impact on the stated objective.

Conclusions through analyses using qualitative study cannot be taken as general and should be limited only to the specific group interviewed. Such studies in spite of being very valuable for in-depth understanding have strong limitations.



Quantitative Studies and Models



A study by Fiess and Fugazza (2008) have tried to work through statistical macro-level and internationally comparable data to attempt to observe relationships between trade and informality. But the results yield a mixed picture.

While cross-sectional data suggests that opening up of trade reduces informality, panel data suggests that the reverse is true.

Micro-level data seem to suggest that lower tariffs and lower restrictions lowers informality in countries.





Informality and Computable General Equilibrium Models



The SAM structure drives the CGE and the intersectoral and factorial relationships can be informed by case studies, targeted surveys.

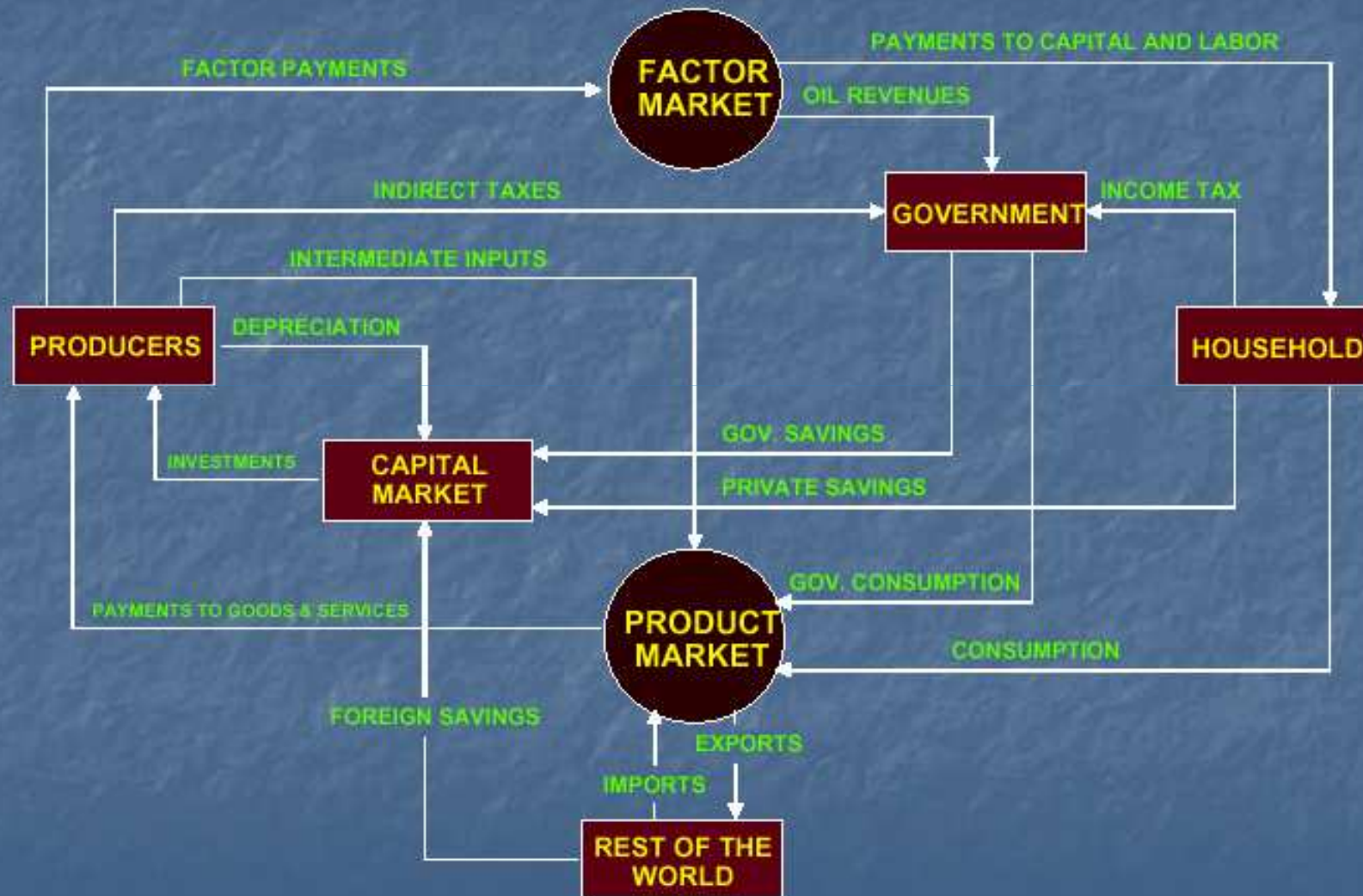
Data needs to be mined from various sources.

CGE methodology is built around markets (both goods and factor) and production (processes) it is necessary to define the informal economy with respect to both of these dimensions.

In terms of conformity with macro analysis the CGE structure is well-suited with various perception of the informal economy.

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Circular Flow of Income





CGE for Examining Policy Shocks on Informality

A CGE model for Benin developed in 1997 looks at changes only around the initial equilibrium level due to linearity, the implicit time horizon is the short run.

Trade policy reform, when undertaken alone, is shown to increase aggregate disposable household income significantly, but the equity impact is unfavourable.

Another CGE uses labour market segmentation, and examines the role of informal employment in the transmission of policy and exogenous shocks to the poor, and the adverse effect of external debt on private incentives to invest.

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Aspects Captured in CGE Studies



A CGE in 1994 showed lack of formal sector employment drives informal activities. An important difference involves the output of formal and informal sectors.

While the two outputs are similar, product differentiation and imperfect substitutability do exist. Informal entrepreneurs generally do not cater to a large market, can have different quality goods and occupy different outlets as compared to the formal retailers e.g., exclusive goods, where limited market size precludes efficient formal sector production.

The small size and flexible nature of informal production give these producers an advantage in catering for the niche markets. Relative prices and the degree of substitution between the outputs of the respective sectors determine the composite good's makeup and each sector's output.

N CGE for Examining Policy Shocks on Informality

Gibson and Kelley (1994) differentiate between production processes based on profitability while Portes, Castells and Benton (1989) look at the informal economy only in terms of segmented labour market theories.

Specific instances of CGE models can be observed in the works of Agenor, Izquierdo and Fofack (2001), Buatista, Lofgren and Thomas (1998) Savard and Adjovi (1997) and Sinha (1999) and Sinha and Adam (2000 and 2006) to capture changes in the informal economy due to changes in policy.

In these models, factors of production, mostly labour and sometimes, land and capital are assumed to behave differently for different markets



Some Results from CGE Studies

Benin CGE (2009): Authors simulate a 20% decrease in tariff rates. In the model formal and informal households are distinguished (households that work in the informal sector) and also in regard of the re-exportation industry by dividing into Benin's eight most important export sectors. The model findings demonstrate a great sensitivity of government's revenues to the activity of the informal sector.

Findings: First, the domestic price of imports declines which, all other things being equal, leads to an appreciation in the import real exchange rate and a corresponding increase in import demands. This appreciation is strongest for those commodities with the highest initial tariff. However, this effect is compounded by the change in domestic goods prices. In the simulations reported here, the price of domestic goods declines on average, offsetting to some extent the effect of the decline in import prices.

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CGE-India HOUSEHOLD CLASSIFICATION: (Rural)

Type (NSSO)	Description	Household classification
1	Self employed in non-agriculture	
	(a) Hires labour regularly	Formal
	(b) Does not hire labour regularly	Informal
2.	Agricultural labour	Informal
3.	Other labour	
	(a) Occupation formal	Formal
	(b) Occupation informal	Informal
4.	Self employed in agriculture	Informal
5.	If it is none of the above, i.e., for other households	
	NOC formal	Formal
	NOC informal	Informal



CGE-INDIA HOUSEHOLD CLASSIFICATION: (Urban)

1.	Self employed	
	(a) Hires labour regularly	Formal
	(b) Does not hire labour regularly	Informal
2.	Regular wage \ salary earner	Formal
3.	Casual labour	Informal
4.	Others	
	(a) NOC formal	Formal
	(b) NOC informal	Informal

The CGE (Sinha and Adam 2006) model for India is used to conduct a comparative static analysis of trade reforms in India under a range of assumptions about the experiments. The measure of trade reform combines: (i) the effect of a 60 per cent reduction in import tariffs across the board for all products; and (ii) a corresponding reduction in QRs (where they exist).

Findings: model findings convey that the nature of the labour market functioning is highly significant in casualisation of the labour force and depressing their wages in the process.

The major realisation is then that it is very important to put proper labour law in place during a period of opening up of the economy, so that a section of the labour force do not get secluded of benefit of growth (when formal sector employers cut cost by pushing their labour force into informal contracts, without any social security).

Moreover, the measures for providing social security by the state to such workers should be carried out very urgently during this period of adjustment.

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Under assumption of formal sector wages being sticky downwards, there is formal labour market unemployment in equilibrium.

Unemployed formal sector workers are assumed to join the informal sector (in this model as is more realistic).

Decline in demand for regular labour is reflected in an increase in the supply of informal labour.

Increased supply of informal labour drive down average real wages in the informal sector.

When regular labour market rigidities are in place, the 'cost' of wage adjustment is overwhelmingly borne by casual workers (contrary to H-O conjecture?).

CGE model are numerical representations of economic theory and intuition. The models can be used to address a broad range of policy issues.

Findings take on board the “second round” effects of policy changes (in circumstances where basic intuition can carry us only so far).

- Can be used to decompose the effects of policy changes.
- Can be used to track the distributional consequences of policy choices.
- Can evaluate feasible policies or “policy packages” in a systematic fashion.
- Can assist in policy formulation by permitting comparisons across the set of compatible policy combinations.

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- A structured model representing the economy provides major directions and relative magnitudes that can inform policy makers and academia on the key outcome of policy prescriptions. The key differences in the structure and functioning of an economy needs to be measured in relative importance.
- CGE models are explicitly structural (do not encounter the identification problems associated with econometric models).
- Forces modellers to be explicit about assumptions (which can be changed).
- Considerable scope for altering aggregation (across sectors, institutions, households)
- Demand and forces data consistency and points toward data gaps-Demand clarity in specification-Help prioritize areas of data collection

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Some Disadvantages

- CGE models are complex and require skill to maintain them but there is merit in developing such skills (not impossible).
- Quantitative CGE models are data-demanding: they do not tolerate inconsistencies in data (this actually is good as data cannot be cooked up).
- CGE models are not “forecasting” models (but can be used for alternative scenarios and help design better policies as outcomes can be examined in details by production sector, by employment and by consumption demand and income of households).

Social Accounting Matrix

Indonesia, Social Accounting Matrix, 1995, in billions of Rupiahs at purchasers' prices.

Source: Biro Pusat Statistik, "Sistem Neraca Sosial Ekonomi, 1995," Tables 3 and 6, Jakarta, March 1998.

Dimensions: 109 accounts and employment of 16 categories of labor.

Imports: Imports c.i.f., duties and taxes in negative F.D. columns.

Available at http://storm.ca/~sdamus/io_data.htm

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Bangladesh

Social Accounting Matrix (SAM), 1993-94

Available at

<http://www.ifpri.cgiar.org/datasets/results/taxonomy:5169?page=2>

Benin

Social accounting matrix of 2006, Benin's Finance Ministry,
Cotonou, 2006

Luc Savard and Mathieu Paquet (2009)

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Nicaragua

Rob Vos (UN-DESA, United Nations, Department of Economic and Social Affairs, Division of Politics and Development Analysis, and Affiliated Professor of Finance and Development at the Institute of Social Studies, The Hague), kindly supplied me with the Social Accounting Matrix for Nicaragua for the year 2000

(Giulia Colombo, The Effects of DR-CAFTA in Nicaragua: a CGE-Microsimulation Model for Poverty and Inequality Analysis)

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IO Tables

Bangladesh, 1962/63 in 100,000 rupees at current purchasers' prices

Source: A. R. Khan and A. MacEwan, "Regional Input-Output Tables for East and West Pakistan," Karachi: Pakistan Institute of Development Economics, 1967.

Dimensions: 35 sectors, industry by industry.

Imports: c.i.f. plus duty column in the final demand wing. Imports from West Pakistan are shown in a separate column.

Exports: in two columns for Exports to West Pakistan and other Exports

Available at: http://storm.ca/~sdamus/io_data.htm

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IO Tables

Nicaragua, 1974, in millions of córdobas at producers' prices.

Source: Banco Central de Nicaragua, "Matriz de insumo-producto de Nicaragua 1974," Managua, D. N., February 1979.

Dimensions: 38 sectors plus one dummy, industry by industry.

Imports: to intermediate import rows.

Available at http://storm.ca/~sdamus/io_data.htm

Indonesia, 1995, total transactions in millions of Rupiahs at producers' prices.

Source: Biro Pusat Statistik, "Tabel Input-Output Indonesia, 1995," Vol. I, Table 2, Jakarta, March 1998.

Dimensions: 66 sectors, commodity by commodity.

Imports: Imports c.i.f., duties and taxes in negative F.D. columns.



Thank You !

