

THE INFORMAL ECONOMY IN THE NEW RURAL ECONOMY

First Draft of a Research Proposal

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Preamble

This proposal is first of all an invitation to join and add to this project. The aim is to kickstart one of several research exercises to integrate results of research from the NRE, NRE2 and CJ Programs and to broaden the disciplinary base somewhat.

The Proposal

The research proposes to model the way households and their assets move back and forth between the informal rural economy and the formal economy, particularly financial equity, entrepreneurs and workers. Several hypotheses are tested to establish understanding about the functions of the informal economy in the co-evolution of rural and urban economies. This work should lead to strategic options for local rural economies to thrive within a global competitiveness framework which otherwise could marginalize them irreversibly. The research questions are posed in the context of globalization, deteriorating rural demographics, isolation from immigration and market frameworks for labour, finance and uncertainty/risk.

We hypothesize that a strategy of building the IE (informal economy), when integrated with appropriate competitiveness strategies for the rural FE (formal economy), may improve the performance of the formal economy and even help sustain its performance. We want to know how the influence of demand from the formal economy translates into investment for the traditional asset-driven nature of informal economies. The focus is revitalization for rural communities, regions and environmental security.

The NRE (New Rural Economy) research program of CRRF (Canadian Rural Revitalization Foundation) has laid the basis for understanding how social capital and social cohesion are involved in revitalizing the capacity of both the FE and IE to produce better outcomes. New forms of cohesion may be emerging within a growing IE, with less trust in the mix. The rapid growth of the IE in all OECD countries could reflect alienation and mistrust of the economic system and lack of confidence in the role of government in it. The IE could be viewed as the custodian of old forms of social capital even as that capital depreciates and grows even more obsolete for lack of means to reinvest.

Part of the reasoning developed for this project centers upon the joint formal and informal status of many rural outputs as environmental security and amenities grown in demand. The second part lies with the growing remittance nature of rural economies as the rural FE struggles and as cities overflow their capacities to handle stress and security. The third part of the model lies in the stability questions embedded in the nature of the balance in the economic productivity and efficiency of the metro and rural economies. This balance dampens fluctuations and helps keep rural economies away from low-level income traps. The IE is relatively unproductive. Labour mobility and property rights to

assets are thought to improve efficiency and productivity. Finally, the fourth part of the model addresses terms of trade between the formal and informal economies, adjusted for technology uptake. Incomplete pricing originating in informal non-market (reciprocal) relationships may prevent property rights and entitlements in the IE from finding higher value uses. The focus here is on the links between informal transactions and transaction costs associated with the regulation, structure and conduct of mercantile and formal markets.

Thesis

The literature generally treats the rural IE as a poor marginalized residual to the formal economy, a sort of sump if you wish. The entrepreneurial behaviour of the IE is considered by government to be somehow illegitimate, characterized by illicit activities, and succeeding only because of tax evasion, a DWD (decent wage deficit) and exploitation of women and child labour. Trade liberalization and globalization are blamed in much of the literature for driving people into the IE. Remedies start with protection and fair trade practices. Local government and tax authorities try to rope in the IE with rules and measures to broaden the tax base. Social and old age assistance are combined with volunteer relief programs such as food banks to alleviate the worst humanitarian, social and visual features of the IE. Development agendas include training, education, standards, regulations, unionization, licensing requirements, taxation and land-use zoning. Remedies tend to treat the IE as being of the FE (Ramirez-Cuerrero).

We take a much more positive starting point. We contend that the contribution of the New Rural Economy to the National economy will depend increasingly on how well the rural IE complements the national FE. That their performance is related is not disputed by the literature (ILO). However, most attention in the literature has been paid to the rural IE as a place in the economy for cast-off assets and people. Relatively less attention has been given to the capital forming and organizational potential, both economic and social, of the IE in the total economy. Performance of the whole is the outcome of a process of co-evolution of the relationships among the parts (Nicolis et al). Thus the relationships are seen here as keys to performance of the NRE by informing the processes of self-organization and learning for rural IEs.

The IE relationship to the FE is characterized here using the metaphor of an on-ramp and an off-ramp to and from the FE. Both the IE and the FE parts of the NRE use these ramps to find the higher productivity needed to compete in/beside global markets. The on- and off-ramps to the FE are thought to improve asset mobility, retool the labour force, add to entrepreneurial skill and other exclusive property rights and build equity to lever formal investment in the NRE. The ramps are the principal source of learning and organizational change in the NRE, especially for blocked family enterprise. The IE has the potential to reshape the FE when the IE becomes more than simply a capacity sump for the FE enabling its flexibility in global markets.

The informal rural economy may reduce the irreversibility of (cost of reversing) the marginalization effect of globalization. The on-ramp from the IE provides opportunity for re-entry of marginalized rural assets to the formal economy, especially the urban formal economy. The formal economy requires new talent, energy and initiative. These have always been supplied by an informal economy somewhere, whether from unemployed

and underemployed labour with support networks, or from immigration and refugees. The rural informal economy has a long-standing role in this regard, complementing the formal transactions of equity, labour and raw materials between the rural and national economies.

Background

What is the IE?

The IE is heterogeneous and contradictory (Cross, ILO). It is defined by the nature of its transactions, more so than by the activities of its participants (Schilizzi). It pursues legal purpose using illicit means (Gherzi, Shende). It is survivalist and at the same time dynamic and modernizing (Amin). It covers a wide range of industrial products and thrives in both urban and rural milieus. It sells in high (tourism) and low (basic needs) income elastic markets. The IE shows relatively low productivity, especially of labour, and is also a source of competitiveness for the formal rural economy (Gherzi). It helps keep wages low in the FE by supplying cheap housing, transport and basic needs, and part-time employment to low-income workers in the formal economy (Khan, 200?). The IE is different but not always separate from the FE.

The IE is about transactions and is characterized by the internalized nature of these transactions within households and communities (Apedaile, 2000; Schilizzi, 2002 [2]). Typical IE transactions take place in informal markets with incomplete pricing, bartering or by inventing mediums of exchange, such as Green Dollars, parallel to the formal currency system. Transactions may involve things and services made of the labour of the seller. Part-time and temporary labour is often transacted, such as day labour or piecework. Informal remittances join the formal market transactions from social income transfers and pension funds in the FE to finance the IE with gifts and loans from relatives' earnings. In this sense the IE is deadweight for the FE. Remittances give to some rural IEs a consumer rather than a producer ethos.

Everyone is involved in the rural IE. Over 90% of non-CMA (census metropolitan area) residents in 1998 participated in some way in the rural IE (Reimer).

Transactions take place in an unregulated manner, making them a function of regulations. Transactions happen through and across networks sensitive to reciprocity considerations, such as social cohesion and exclusive behaviour. IE transactions seem to thrive alongside a strong formal economy and with globalization (Ebenshade).

One sign of a significant IE is a low proportion of tradables in the economy. Local rural economies seem to feature non-tradables. For example, SMEs (small and medium sized enterprises) in rural Alberta trade very little beyond a 50km radius, which is one definition of a non-tradable economy. Three reasons are isolation by high transaction costs, the survivalist emphasis placed on mutual self-sufficiency for basic needs within the IE itself, and insufficient rent-capturing opportunity to attract competition from the formal economy.

The New Rural Economy blends formal and informal transactions, sometimes within the same transaction. The distinction between the IE and the FE, though difficult at times, is

needed to separate issues arising from nation-building sector competitiveness strategies based on trade liberalization, from issues arising in local initiatives to sustain communities. Specialization, driven by competitiveness and enabled by technology, leads to pressure for rural restructuring. Information and biotechnology, the new forces behind competitiveness in the New Rural Economy, involve substantial retooling of the relatively informal old rural economy (Apedaile, 2000). The highly diverse informal component of the NRE seems also to be restructuring with the new uncertainties generated by the retooling process.

At the same time the informal rural economy is characterized by an ability to operate within imperfect markets, such as those that link the rural and urban economies (Schilizzi, 2002). Market imperfections are one way to describe markets with little and/or erroneous information, and having performance problems with fragmented/concentrated structure or recognition of new products. These characteristics apply for intangibles such as amenities and environmental security, both experiencing rapid growth in demand in metro economies and political constituencies. Imperfections also exist for tangibles, such as value-added commodities, where demand information is filtered to rural suppliers through concentrated markets for transactions and agency services.

The informal part of the rural economy is understood to substitute social norms for legal contracts, social capital for economic capital and social enterprise for economic entrepreneurship. The IE operates outside the law, often because there is no alternative (Gherzi, 200?). The research tests this understanding. Transactions are negotiated and informed through reciprocity and associative frameworks rather than through market and bureaucratic frameworks (Reimer and Apedaile, 2000). Non-monetary units of account combine with or substitute for monetary settlements. Formal tax regimes may be circumvented, in the process thereby excluding considerable value-added and income from public accounts.

The IE is sometimes referred to as popular capitalism, to distinguish it from entitled mercantile capitalism that is the formal economy (deSoto, 1989). The IE leads to a vindication of the importance of individualized property rights and competitive markets as the engine of growth. It thrives on an individualistic ethic. DeSoto further argues that the IE is a viable way to organize and mobilize assets that would otherwise be 'dead capital' (deSoto, 1999).

The IE circumvents high entry costs into the formal economy for dynamic entrepreneurs (Gherzi). In this sense, a large IE signifies a failure of governance in the form of non-market barriers to entry, cronyism and political patronage. The IE shows up therefore in gangs and kin groups to substitute virtual rights for governance failure. The IE is also prominently involved in housing construction and artisan crafts where transactions can avoid taxation, in hawking, vending and local retailing of non-tradables, and transactions services such as trucking and courier service.

Globalization and the IE

Controversy exists in the literature over development measures for the rural IE in a rapidly globalizing world economy. Rural development programs are nearly universally designed as adaptation to economic restructuring for those that are not "first past the post"; ... programs for losers. Sector, industrial and trade policy is for the FE. The

question is whether the policy marginalization of the rural and urban IEs is reversible, despite the pessimism in the literature.

The IE has expanded coincident with globalization over the past 30 years (Schneider et al 2001). The expansion could reflect features of the boomer and post-boomer era or general lack of confidence in the future. The ILO actually contends that the advance of globalization serves to increase the size of the IE. Carr and Chen argue that globalization leads to a larger IE. They argue that integration of the IE into global supply chains associated with its low bargaining power, and breakdown of social contracts is impoverishing the IE population.

The nature of the rural resource-based FE creates greater reliance on the IE for rural populations. The global substitution of industrial goods for raw natural resource commodities combined with increased productivity in natural resource sectors reduce commodity prices over the long term. Wheat is an example (Antle et al). Commodity revenue is a weak base for growth. The IE becomes the only source of employment and experience for youth because of jobless growth in the FE.

Today nations adopt global competitiveness strategies that go well beyond comparative advantage founded upon natural endowments (Howes et al). In this sense for resource-based rural economies, rural IEs could be viewed as policy constructs, in the same way that the competitive FEs are constructed from policy. The implication is that competitiveness is much more about organization, for example households, than it is about individuals.

A large part of formal rural economies has been organized as family enterprises, whether incorporated or not (Tsuboi et al). Family organization faces limits to restructuring without self-destructing. Once a family reaches its self-defined limits, its transactions appear to move out of formal markets and its assets and family members become more informally pluriactive as a consequence of globalization.

It works this way. Informally organized activities, transactions, and remittances replace formal transactions as sources of household revenue. Size-biased technology and regulations exclude access to property rights and reduce their financial viability. Margins from formal market transactions grow thinner as proprietary rights to organizational networks increasingly govern and extract rents from these transactions. The growth of the family business fails to keep up with income expectations leading to progressive disengagement from the formal economy and youth migration. The IE expands.

The IE also expands because the FE needs to shed costs as it self-organizes. The IE offers entrepreneurs in the FE, who feel pressure from globalization, a 'capacity sump' to download uncertainties and costs of adjustment so as to maintain their asset mobility and agility in the formal economy. Financial, psychological and social costs of retirement, health care, disabilities, injuries and excess capacity can be shifted to volunteer associations, families, churches, and the State. The informal economy acts as a safety net for people and their assets. In the process these assets are usually devalued, particularly labour.

Devaluation could be termed collateral damage from globalization and competitiveness policies. A DWD (decent wage deficit) may emerge to challenge national treasuries to

meet civil standards with urban (proportionally larger FE) to rural (proportionally larger IE) income transfers. On the other hand, old technology (used cast-off equipment), low value skills of aging labour, access to open access and common property assets like water, keep costs of production and prices low for the IE.

The NRE may be entirely an informal economy for all practical purposes, especially when the formal parts become social enclaves. The goals shift to preservation (survival) of life style, place and institutions, from profit. Lifestyle could be defined as a system of complex relationships among property rights holders, social values, heritage, income and especially merit accorded to a kind of entrepreneurship involving respect, ingenuity, perseverance, experience with physical hardship and reputation as a problem-solver. Volunteers in the NRE are motivated to build and maintain social capital to sustain their lifestyle. The NRE sites of Ferintosh and Hussar in Alberta are examples.

Hypotheses

The research is driven by five general hypotheses selected to get to the roots of possible synergies between the IE and the FE, both urban and rural.

The rural IE is an under-performing functional asset to the rural and urban FEs.

The IE provides organizational flexibility and asset mobility to the FE in the form of recycling for labour and entrepreneurial skills, a market for obsolete, damaged and surplus equipment, social stability for restructuring, and a substitute for formal defined benefit pensions. The IE absorbs uncertainty from the FE

The value of this hypothesis lies in understanding better how to improve performance in the rural IE with policy, training, education, property rights, financial markets and changes in governance.

The rural IE is countercyclical to the rural and urban FE

At the bottom of the business cycle, the IE is proportionally larger, weaker and more survivalist, and less dynamic and modernizing. At the business cycle strengthens, the IE shrinks in size, becomes stronger and more dynamic. Size refers to the contribution to the local economy in terms of employment, value of sales, and income generation. Strength refers to volume of investment, expanded on-ramp activities to the FE, and the pace of self-organization. Survivalist refers to orientation of transactions to meet basic needs. Dynamic and modernizing refers to innovation, and transactions with high income elastic demands.

The value of this hypothesis is co-ordination of investments in the IE with the FE business cycle. The inter-cyclical reinforcement of the survivalist component of the IE may be weakened by timing the preparation of assets coming down the off-ramp on the downturn for re-entry into the FE on the upturn.

The rural IE is well positioned to deliver the intangible and non-market components of the triple bottom line for the urban and rural FEs.

The IE transacts under conditions of formal market failure relating to social capital, environmental security, countryside amenities and thin volumes of transactions relating to untried innovative goods and services or micro-demand (Lesourd and Schilizzi). Many

of the features of these market failures could be treated as joint-product situations for which the incomplete pricing behaviour characterizing many IE transactions fits well. Specifically, the IE could organize pollution processing, ecologically sound resource practices, recycling and delivery to national standards of social services through financially sound but not-for-profit NGOs.

The value of this hypothesis is the opportunity to harness a significant part of the IE to resolve imbalances in the supply and demand for rural amenities, services and environmental security, which the FE is having difficulty addressing within market and bureaucratic frameworks. Should this be possible, the household organization of the IE could have an extended period of usefulness.

The rural IE contributes to the self-organization of the urban and rural FE as an integral part of the Nation's co-evolution within globalization.

The FE can gain access to common property rights to physical assets, infrastructure, skills and talents in the labour force, organization, institutions and finance that underpin the IE. The entrepreneurial feature of the IE rebundles these common property rights with individualized rights to make them more exclusive and thus a source of economic rents. The urban and rural FE through out-sourcing and transfer pricing can access these rents. Uncertainty for the FE is less than if these rents were generated through wholly owned property rights, especially in periods of great uncertainty, such as the declining phase of the business cycle.

The value of this hypothesis lies in improving the agility of the FE through recombination of property rights and the opportunity for adding rents and profit to the earnings structure of the rural IE.

The rural IE is shaped by the manner of governance of the territorial jurisdiction in which the activities and transactions take place, and by the nature of the margins (edges) of the market structures of the FE.

The IE is attracted to the FE, not marginalized by it in this hypothesis. The main attraction is the gaps in the laws, regulations and market behaviour protecting the FE from new entrants. The more restrictive the entry, the greater is the activity of the rural IE, stemming from both the exclusive nature of this protection and the opportunity to save costs within the FE. Land use planning and zoning measures are one of the main stimulants to the IE and are one of the sources of breakdown to social cohesion between people and groups belonging within the IE and FE sharing the same rural territory.

The value of this hypothesis is the insight it offers into broadening the concept of governance to include the individualist ethos of the IE as an asset.

Theoretical building blocks

The IE is complex. Its relationships with the FE are neither linear (causal) nor static. Members of the IE are individualistic, audacious, mistrustful of the whole economic and political system, and socially excluded from the formal economy population. Its informal markets are inefficient, fragmented and prone to failure. It relies on open access and common property rights and depends on social entitlements for basic needs and services. It is survivalist and dynamic. Some members are recent arrivals. Some are

multigenerational participants. Savings and financial equity markets are also informal and illiquid.

The theoretical building blocks offer at best a partial treatment of this complexity. We choose to start with the four theoretical relational frameworks developed by Reimer et al to model the rural/urban and IE/FE dimensions of the rural IE. The second building block is the theory of complex dynamical systems applied to natural resource economies by Apedaile et al, with particular reference to the IE as a low-level equilibrium trap (Solomonovich et al, 1997, 1998, 2001). The third block is drawn from development economics with emphasis on growth theories and strategic investments in social and economic infrastructure to unlock growth potential in the IE. The fourth block is strategic trade theory and its application to rural revitalization to improve rent capture by the IE. The fifth block is a combination of Coasian theory of the firm, emphasizing transaction costs, property rights, finance and uncertainty to learn how the IE could be involved in rebundling property rights and entitlements with the FE and the government so as to attract financial equity. Finally, the theories of social capital and social cohesion advanced by the NRE research are applied to institutional innovation compatible with the individualism and audacity that characterize the IE.

The whole approach builds on a decade of complex dynamical systems (CDS) work, which has established a published base for examining up to four dimensions of relationships among environmental security, natural resource extraction and industrial components of an economy (Solomonovich et al, 2001, 1998, 1997). The IE is described in the literature (Sassen) as being highly predatory.

We adopt the Coasian arguments (1937) underlying the self-organization of property rights and the quest for entitlements from the state by entrepreneurs. The heart of these arguments is that entrepreneurs seek to reduce transaction costs and exposure to uncertainty, by converting some of it to risk and insuring that risk. But mainly they reduce uncertainty by rearranging their property rights and equity portfolios to shift uncertainty off their balance sheets. Evidence of this behaviour lies in recent exposure of fraudulent accounting practices at Worldcom, Enron and Xerox, where off-ledger balance sheets are used to offload uncertainty and liabilities to improve profit forecasts. Risk equity premiums are a feature of the financial markets in which rural entrepreneurs have to work hard to shift uncertainty. Offloading uncertainty seems to be a link often identified between the formal and informal rural economies, permitted in part we hypothesize, by social capital and social cohesion.

Ricardian arguments address the quality and capacity of rural assets and access to them through property rights. The rent component of earnings drives asset mobilization. The prospect for holding on to wealth is directly attributable to property rights. Rents and profits, as opposed to wages are the principal sources of equity/wealth. Equity and wealth are the basis for financing further investment.

The informal economy is not viewed as a direct source of rural growth in part because of weak endowments of property rights and therefore a weak financial base for investment. Proprietary property rights are about organization, a major determinant of revenue, yet weak in informal economies. Intellectual property rights underlie revenue attributable to workforce skill and talent. These are often lacking in informal economies and lie victim

to positive selection bias in out-migration. Real property rights are about access to resources such as land and ocean, and ownership of physical capital such as plant and equipment. All rights to rural assets may take the form of private individual, exclusive or open access rights, and/or common rights. Informal economies do feature landless and un-entitled entrepreneurs who appear to rely on the common open forms of rights for access to assets.

Arguments established in welfare economics are used here to address the question of income transfers to compensate for policy-induced losses in the rural economy. Rural financial issues are generally understood to hamper reinvestment in rural economies. The work of Pareto, Hicks and Kaldor is brought to bear on competitiveness policy and its fallout for the relationship between the urban formal and rural informal economy. Issues of scale bias from combining industrialization, IT and compliance with the global regulatory approach to standards make it difficult for family-based entrepreneurs to sustain their business within the formal economy.

Development economics provides the theoretical base for a strategy of public investment in EOC (economic overhead capital), such as roads, water and sewer and communications, and SOC (social overhead capital), schools, health services and volunteer associations. These two categories of public infrastructure are major sources of costly over-capacity in rural economies, major open access assets for the informal economy and major targets of urban politicians. They appear to have twice the development impact in urban places, including rural towns than in rural places (? Choices, 2002), yet are demonstrated to be essential to private directly productive investment (Mainaly).

Krugman's arguments (1986, 1993) demonstrate just how powerful and opaque trade policy can be in shaping rural outcomes. Trade policy matters a lot for rural revitalization. Trade is a strategic instrument within much larger international agendas of nation states. Trade theory informs the problem of industry dependence in rural places, whether fishing, agriculture or forestry and mining. These arguments apply also to finance and labour markets. Thus endowment-based competitiveness policies may deliver substantial collateral damage for rural economies in a world of policy-constructed trade advantage. Howes and Markusen go further by arguing that unemployment and economic dislocation are inevitable and cumulative with trade liberalization. A local strategy of self-sufficiency around non-tradable goods and services with reliance on local equity in social and economic capital perpetuates economic and technological isolation from prosperity. This familiar CED (community economic development) strategy expands the survivalist proportion of the informal economy.

Market theory is part of the reconstruction of on-ramps to the formal economy. Competitiveness policy makers may think of the safety net feature of the off-ramp to the informal economy as taking the shock of counter-strategies by rivals. Outcomes/mistakes of competitiveness policy, such as the disputes between Canada and the USA over the Canadian Wheat Board, dairy products, softwood lumber, durum wheat and seed potatoes, all drive FE enterprises and workers to take refuge down the off-ramp to the IE.

Strategies to get out of the safety net to get on the on-ramp to the formal economy require a different approach to competitiveness. Uncompetitive markets are advocated,

constructed around barriers to entry. Market segmentation is a text-book strategy for informal entrepreneurs to gain access to oligopolies through tactical niches. Oligopolies are one way that markets organize to protect against free trade. Product differentiation completes this strategy. The theoretical implications point to closer relationships between urban and rural IEs. These strategies require a close knowledge of markets by micro-enterprises. The arguments extend to networking by the rural IE to the intermediate goods and services markets of the urban IE and FE, as opposed to the labour market for the rural FE enclave.

Description of the model

The parameters

The higher the proportion of IE transactions for a territorial economy, such as a rural municipality, the less the potential for revitalization of productivity and growth in that territorial economy. The emergence of the NRE favours all the following conditions for a fast growing IE. The higher the transaction costs, especially transaction taxes, licenses, liability insurance and agency fees in the formal economy, the faster the substitution of informal for formal transactions. The greater the amount of government regulation or social sanction, the higher the transaction costs. The greater the proportion of household/family enterprises relative to other enterprise organizations, the faster the disengagement of the whole rural economy from formal transactions. The more intensely competitive the FE becomes, a feature of globalization with trade liberalization, the more attractive it is for individuals and households to disengage for the less intense slow life of the IE. The faster the pace of technological change globally, the more difficulty household enterprises experience with self-organization needed to be first-past-the-post. The greater the specialization of household enterprise, the greater the uncertainty to be hedged by diversification through informal transactions.

The nature of IE transactions

The IE is distinct but not separable from the FE. All economic agents from households to corporate institutions engage in both economies. The IE consists of transactions informally organized beyond household boundaries, including those that involve IE substitutes for household consumption otherwise transacted from the FE. The survivalist part of the IE is defined by the predominance of informal consumption substitution transactions over informal productive and capital forming transactions. Predominance of informal production and capital forming transactions characterizes the dynamic entrepreneurial part of the IE.

The IE is characterized by household/family enterprises behaving like micro-conglomerates by internalizing many of their activities to reduce transactions costs. Those activities not internalized are exposed to intense predator-prey behaviour ranging from mutualist support networks to pathological extremes of competition. Wealth in the IE is generated by work and enterprise within the formal economy. The IE grows by population increase and from remittances from and sales to the FE.

The informal organization of transactions for survival works well in Canada and Japan. Informality works much less well for defining property rights needed to mobilize rural

assets for purposes of enrichment of the population. The problem is that formal access to property rights is essential to marshal finance and therefore capital of all types. Capital is needed to complement labour and natural resources such as land.

A metaphorical model

The FE component of the model could be characterized as a toll road with its FE destinations. The IE is off the toll road on common access to informally organized economies. The off-ramp from the toll road is much wider and more used than the on-ramp (Figure 1).

Formality lies in the tolls entitling the use of the toll road and the discipline of speed and lane behaviour that goes along with intense high-speed traffic. Informality lies in the absence of tolls (sales and payroll taxes), less traffic or a slow life (intensity), and freedom from the discipline of the road (regulation). Before the toll road was constructed, with its new rules and pricing, the whole economy was largely informal, including its tax regime and behavioural conventions. The IE of the NRE is a feature of the evolution of the organization of the economy toward new types of rights and entitlements and institutions to access these rights (ramps).

Slip-sliding households

The model argues (Tsuboi et al) that the household organization of farming, commerce and artisan manufacturing has become unsuitable to the formal dimension of the NRE. It has been argued that this problem lies with the organization needed to undertake the type of learning now required to be successful in the FE (Apedaile, 2002). Consequently, the household as an investing and producing unit relies increasingly on informal transactions, retaining formal transactions for its consumption and savings function. Household enterprises disengage by slipping into the IE, selling off their rights to assets, or accepting massive devaluations. In many cases whole rural communities and regions become predominantly informal organizations of enterprise transactions involving outputs from low or scrap value assets, including obsolete intellectual property and tired labour.

Formalize what can be formalized

The model design is based on deSoto's contention that the enterprise component of the IE can be formalized, though not in the same way as enterprise was organized before taking the off-ramp. The on-ramp represents the process of formalization of enterprise originating in the IE. This process is not the same as applying programs and policies to the IE as if it was part of the FE. Instead the process involves entitlements and property rights enabling formal businesses to emerge without the limitations of household organization. For example, profit seeking households may imbed themselves in not-for-profit NGO corporations. This process is a strategic heads-up affair working with and around the powerful forces of economies of size, market entitlements, finance and a wide range of policies.

The model acknowledges that most households in the IE are unlikely to shift back into the FE individually whether by entrepreneurship or by retooling their intellectual property. Some choose not to disturb valued family institutions. Some are retirement households. Others face pathological obstacles that trap them.

Refuge or ghetto

The model aims to tease out distinctions between the refuge IE and the ghetto IE in the NRE. Survivalist households make up the largest part of the rural IE. Their effect on growth and productivity of rural assets in the NRE depends on their number, the size of the remittances that support them and periodic formal employment by the FE. Small remittances seem to be supplemented with low-end employment and odd jobs.

The main economic activity of the survivalist IE is consumption. The pattern seems to reflect the blend of predictable remittance income with income from informal and formal market activity. The larger the survivalist IE the greater the opportunity for the dynamic entrepreneurial IE to supply substitutes for goods and services from the FE, and the greater the economic multiplier of the remittances. However this substitution behaviour cannot be a strong source of growth when the survivalist households are poor.

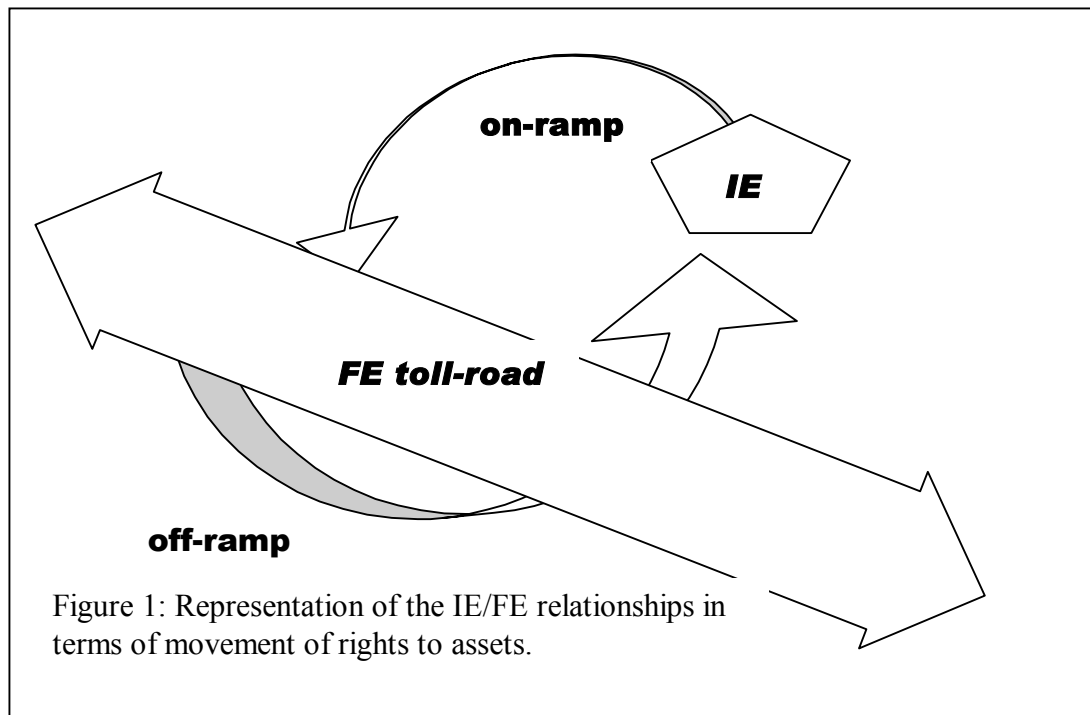
Rural poverty is extreme survivalist and the IE associated with it fits the description of a ghetto economy, in the same way that the rural FE becomes an enclave economy. Both are isolated from mainstream social activity and economic enterprise. Neither contribute to social cohesion or social capital. Relief measures and social services pump revenue into a local IE, but likely enslave poverty households to dependency. Mutualist behaviour in poverty ghettos should not be misinterpreted as social cohesion or evidence of productive social capital just as cronyism in an enclave economy is corrupt and antisocial.

The principal advantage of the NRE over an urban economy for the survivalist IE is the open access property rights. A strategic formalization of transactions of these rights can open opportunity and present an element of control over the future for all survivalist households, especially those for whom the rural IE is seen as a refuge rather than a ghetto.

Summary

In summary, the model is premised on the idea that households reach their limits as organizations for business, in the face of rapid reorganization of property rights and entitlements in the FE. The model aims to help us understand how households can participate in new ways in the FE after having shifted many of their transactions into the informal rural economy. Property rights, uncertainty and transactions costs are expected to form major parts of the model.

The IE part of the NRE performs a function for the FE. Social processes will decide on its merit and worth in terms of willingness to pay for this function with income transfers. As long as transactions costs are substantial relative to income prospects, households are economically motivated to move their transactions to the IE from the FE. Economic and social refugees may be expected to show up in the rural IE as long as globalization increases the intensity of life in the FE.



Method

The research plan requires three years with a conventional agenda. The first year is used to explore the hypotheses using the data base, both secondary and on-site, and build components of the model. The second is used to verify and apply the model to revitalization of the informal economy in 10 selected sites, 8 in Canada and 2 in Japan. The third year is used to revise the models and interpret the results for publication.

The five hypotheses are to be explored in two stages. The first is an exploratory survey of literature and of households deemed to be active in the IE to screen the hypotheses and inform the modeling. The second stage will involve data from a sample of households designed to allow inference. We hope that idiosyncracies do not prevail in the form of high variances, so that the hypotheses or their alternates may be affirmed. This second stage will include variables and parameters defined by the models.

Three modeling approaches relevant to the IE have been under development for some time. Hailu and Schilizzi have been working with agent-based modeling. This approach is iterative and particularly adapted to processes of change such as revitalization. The second approach, used by Nakagawa, Apedaile and Kusano uses Stella software to shed light on revitalization strategies under conditions of globalization and trade liberalization. This approach is used to set the global and trade contexts for the agent-based modeling. The third approach is CDS modeling by Solomonovich, Freedman and Apedaile to specify the consequences for equilibrium growth, stability and low-performance trapping for strategies to change the market and technology relationships between natural resource industries and the rest of the economy. Parameters already identified by this modeling will be considered for use by the agent-based modeling.

Once rural IE households have been characterized as survivalist (FE refugee or poor), or dynamic entrepreneurial, each type will be set up for agent-based modeling. The focus

will be on thresholds for various types of transaction cost in markets to determine two things. First to understand what kinds and levels of transaction costs trigger a shift by households to informal and internalized transactions or vice versa. Second to develop strategic paths to formalize informal transactions even in the presence of 'large' transaction costs. These costs are a feature of the formal economy and global accords, and are unlikely to be modified solely for revitalizing rural economies.

The strategic paths will focus on ways to formalize property rights transactions and the rebundling process by which individualized rights may be combined with common or open access rights to improve their tradability. These paths should lead to ways to anticipate future direction for the rural IE.

The first among several difficult methodological issues are the definitions of formal and informal transaction and activity. Reimer uses the Statistics Canada definition of informal to cover household activity in substitution for a transaction beyond the household. Thus, bed-making and cooking are IE activities in lieu of staying at a hotel and going to a restaurant. The same applies to housework when maid service is available. When a farmer does accounting or welding in lieu of outsourcing, this activity is part of commodity production in the FE. The contradictions must be resolved.

The second is the disaggregation of the IE and FE. The literature suggests that youth and other new entrants to the IE likely behave differently to second and third generations in the IE. The implication is that new entrants need to be targeted in the model for understanding reversibility problems associated with the off-ramp experience. It seems to be a challenge to represent the voluntary or forced nature of their disengagement in the model in terms of the blend of formal and informal productive and investment transactions that come with them into the IE.

A third category of methodological difficulty is the distinction if any between urban and rural IEs. Reimer attempted to catalogue some of these differences (Reimer). But the literature is unclear on whether the distinction is one of substance or degree. One difference is the greater quantity of open access resources in rural economies. Certainly the rural IE receives urban IE migrants for cost advantages often associated with open access resources. A second is that the triple bottom line for the urban FE may offer income opportunities unique to the rural IE. At this point, the distinction seems to lie mainly with the nature of the property rights and the kinds of transactions costs to be internalized.

We expect to define new kinds of data needed to understand revitalization. From this definition, we aim to construct useful transformations from established NRE and Statcan data. The following issues are examples of unconventional data requirements.

1. The IE appears to be associated with low education performance. Ranking of school performance across Alberta seems to fit well the classification of local economies. The best schools are in the most formal economies. The worst are associated with aboriginal and poor rural economies. Does this mean that learning dies with increasing involvement in the IE?
2. Agricultural NREs appear to have started their histories as predominantly IEs, gradually formalized almost completely and are now tending to predominantly IE

- status again. The FE sets the rules and they appear more and more exclusive to artisan cultures and household organization. How to characterize these rules for the data needs of modeling?
3. Eligibility thresholds (rules of engagement) for government programs induce disturbance to the strategies for resorting to informal and formal markets. Examples are: GST filing exemptions, EI, welfare payments, business liability insurance, fuel tax rebates and NISA. Can the degree to which communication of these rules penetrates the IE be measured?
 4. The patterns of indebtedness that characterize various groups of active IE participants should influence their decisions to use the off and on-ramps to the FE. Can informal and formal indebtedness be distinguished by the data, including the differences in collateral and servicing?
 5. Youth enter the IE without ever having been part of the FE. Young rural journeymen start as informal labour and are paid less in FE transactions than urban journeymen, but are less intense about productivity and output. Their IE transactions allow this. Is there a measure for their willingness to take the on-ramp to the FE of their own freewill?
 6. Would the IE tend to extinction without the constant arrival of newcomers carrying FE knowledge? The IE is characterized by indigenous knowledge, such as hunting, fishing, forest ecology, animal husbandry and timing of farm operations. Indigenous knowledge dies with the people, whereas FE knowledge is accumulated within institutional/corporate memory, often on the form of tradable proprietary and intellectual rights. See point 1 above in this list.
 7. Are computers and the internet penetrating the rural IE? The internet lowers transactions costs and therefore should draw transactions back into formal markets. However the computer increases intensity of work and is most productive with an intense learning culture. Software is simplifying this learning and even making computer use independent of computer skills.
 8. Does the predominance of cash in the IE translate into the 'mad money' syndrome? How does the consumer side of the IE behave under different patterns of cash flow? Some IE households enter the FE labour market for as long as it takes to earn cash for a project such as a replacement car or a home renovation. It seems that they accept lower wages and poor working conditions for short times when combined with a commitment to rehire them when they need more money. Other households treat remittance income as mad money, spending it on substance abuse and quads.

Expected results

The first result is expected to be a net addition to the understanding of rural revitalization issues. This is the core purpose of the NRE Program.

The IE perspective suggests that Canada's sector competitiveness policies for agriculture, forestry and fishing are premised upon transforming the already relatively formal household-based rural economy, into an industrial organized economy. The consequent

rural FE is becoming larger in terms of its share of local GDP and smaller in terms of numbers of households, taking measurement problems into account. These outcomes signal that the trust dimension of social cohesion, as referred to in the IE literature, may be eroding. Social capital and the capacity to revitalize economic life are increasingly fragile because of reinvestment problems in the growing IE. The FE, despite many relationships and blurring with the rural IE, appears to be taking on more and more of the characteristics of production and social enclaves as the household/family form of organization becomes irrelevant in the FE.

The second result is a series of simulated strategies and outcomes for local economies, such as the Hussar and Neguac economies, centered on discovering synergies from the informal and formal components. The focus is on stabilization and improvement of wealth and its distribution, to make reinvestment as inclusive of informal and formal enterprises and households as possible.

The context for local action is that local strategies are powerless by comparison to economic and social policies of the day. Globalization and liberalization are large forces beyond local influence. We know from the IE literature that efforts to stimulate and mobilize assets in the IE using FE programs don't work in any economy. Licensing, zoning, tax audits, tied grants, business credit and management, and even micro-credit and training remain ineffective. The rural IE continues to grow or migrate and remains closely associated with unemployment and underemployment, with women, and with poverty.

This research does not intend to produce results to challenge this consensus. The modeling instead proposes to define new organizational options for rural revitalization integrated with findings from the four INE/NRE2 themes: governance, services, capacity and environment, and communications.

The third result is to design policy changes with the potential to favour the contribution of the informal economy to rural revitalization, including the rural FE. The aim is for innovations for competition, infrastructure, taxation, finance and income transfer policies for the natural resource extraction sectors and rural development.

We aim in this research for insight into strategic policy extending beyond short-term 'win-at-all-costs' competitiveness to improve the performance of the IE. The strategic options appear to lie with the prospects for reversibility of the flows of rents and investment between the global FE and the local rural IE. The models under consideration here look explicitly at results for the FE/IE links in the form of on- and off-ramps. The work treats these ramps to the FE, not as a transformation/legalization of the IE, but of a migration of rights holders to assets between the IE and FE, to be incubated, repaired, retooled and reorganized within the IE, for later contributions to productivity in the FE.

The fourth result is strategic options available to municipal governments faced with an individualistic and often alienated informal economy and demographic and economic devitalization. The idea is to broaden the institutional options beyond approaches used for boosting the conventional formal economy to mobilize informally organized property rights. These options include a role for NGOs to govern predatory behaviour and incubate enterprise, and a broadening for the function and membership of chambers of commerce.

The results of the literature review to date raise interesting points about the need for organization and representation of the IE within its territorial milieu. These needs point to governance issues. The IE literature repeatedly emphasizes the predatory nature of economic transactions within the IE and the nearly complete extraction of economic rents from the IE through its links with the FE, an outcome associated with failure of market governance. The literature often implies the substitution of criminality and violence as a substitute for social capital. This understanding of rural social and economic market issues is not new. What appears to be new from the IE literature is insight into how to broaden and integrate several very different forms of governance to revitalize the sense of purpose and to represent the potential energy of the IE for the whole (FE and IE) rural economy. An IE, which is a marginalized residual to the FE is a deadweight free-riding burden on a rural economy.

Postscript

The more I read and reflect, the more I think that the idea of an informal economy may be bogus. The literature is not often science-based. The notion of an informal economy is perhaps heuristic at best and at worst distorts the communication of issues arising from inadequate markets and policy mistakes.

Households do not exit a formal life and enter an informal life and vice versa. Everyone carries out some transactions informally. Sometimes the same transaction is informal one day and formal the next. Activities are not formal or informal per se but may be organized formally or informally. For some hours the household organizes itself formally, and at other times informally. Tax evasion, free-riding and illicit/criminal behaviour are much better treated in a disciplinary fashion. These behaviours cross all kinds of boundaries and are not exclusive to one type of economy.

It seems hardly useful to characterize household maintenance as part of informal activity because one could hire a maid. Similarly, to observe that introduction of the GST immediately expanded the number of illicit transactions and therefore the size of the IE does not inform the economic revitalization challenge for rural economies.

Nevertheless, this investigation has benefited from using the framework as if two mutually exclusive economies exist with households slipping seamlessly in and out of each all the time. It does seem reasonable to say that when a household employs informal transactions most of the time that it could be called an IE household, in the same way as when a person spends most of her time in Canada, she could be called a Canadian!

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