Changing Approaches to Regional Economic Development: Focusing on Endogenous Factors

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This address provides....

- An overview of the evolution of theoretical economic development and policy and planning paradigms as approaches to the study and practice of regional economic growth and development.

- An emphasis is on the processes of endogenous regional growth and development and how those factors affecting endogenous development might be modeled.

- A summary recently work by the authors to develop a new framework to conceptualize and model endogenous regional economic growth and development.

- A discussion of a new planning strategy framework for regional economic development that is firmly embedded in the principles of endogenous regional growth and development that is proposed by

Regional economic development as a ‘product’ and a ‘process’

- It is the *product* of regional economic development:
  - measured in jobs, wealth, investment, standard of living, and working conditions - with which people living, working and investing in regions tend to be most concerned
  - generally, increases or improvements in these measures are equated with economic growth and development.

- It is the *process* of regional economic development:
  - for example, industry support, infrastructure, labor force or human capital development, and market development
  - with which regional scientists and regional economic development planners and practitioners tend to be most concerned.
Some definitions of regional economic development

- Blakely’s (1994) has definition:
  "... a process in which local governments or community based organizations are engaged to stimulate or maintain business activity and/or employment. The principal goal of local economic development is to stimulate employment opportunities in sectors that improve the community, using existing human, natural and institutional resources (p. xv)."

- Malecki’s (1991) definition:
  "... a combination of qualitative and quantitative features of a region’s economy, which the qualitative or structural [are] the most meaningful...The qualitative attributes include the types of jobs—not only their number—and long-term and structural characteristics, such as the ability to bring about new economic activity and the capacity to maximize the benefits which remains within the region (p. 7)."
Economic development thus has both a ‘quantitative’ and a ‘qualitative’ dimension

- It is *quantitative* with respect to the measured benefits it creates through:
  - increasing wealth and income levels
  - the availability of goods and services
  - improving financial security
  - and so-on.

- It is also *qualitative* in:
  - creating greater social/financial equity
  - achieving sustainable development
  - creating a spread in the range of employment
  - gaining improvements in the quality of life in a region.
Regional economic development as a *matrix* of ‘qualitative’, ‘quantitative’, ‘process’ and ‘product’ outcomes

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<tr>
<th>Regional Economic Process</th>
<th>Qualitative Inputs/Output</th>
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<th>Regional Economic Product</th>
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Stimson, Stough and Roberts (2006), *Regional Economic Development: Analysis and Planning Strategy* (Springer), give this definition of regional economic development:

- “Regional economic development is the application of economic processes and resources available to a region that result in the sustainable development of, and desired economic outcomes for a region and that meet the values and expectations of business, of residents and of visitors”.

While this definition is far from perfect, it does reflect a shift in economic ‘product’ and ‘process’ thinking.

- “A balance between the qualitative and quantitative goals of economic development presents a challenge to traditional neoclassical economists and to the emerging breed of economists who recognize that regional economic development can occur on a more sustainable basis. This is not to suggest that neoclassical theory ideas should be dismissed—far from it. Rather, they need to evolve to accommodate those changing values that society holds on expected gains from economic development.”
Evolving paradigms for economic policy and regional development planning strategy

- Policy for economic development and regional planning strategy has undergone a series of evolutionary stages during the period since World War II, driven by different paradigms of economic thought.

- Those paradigms have shaped the way regions and local communities and people think about, and plan for, the future.

- But.... much thinking on regional economic development still remains embedded in the paradigms of the 1970s, because of an inherent reluctance of many regions and local communities to pro-actively embrace change.
Stimson, Stough and Roberts (2006) conclude....

- Many regions are not re-equipment themselves fast enough to compete effectively in the global age of business and technology of the post-industrial economy.

- To compete successfully in the global economy, regional organizations and businesses need to:
  - Understand the implications of the paradigm shifts occurring in economic policy and regional economic development planning strategy
  - Build the flexible and smart strategic infrastructure to do so.
Changing focus for economic development policy and planning strategy

Focus of Economic Policy

Keynsian thought
Postwar - mid 1970s

Monetarism thought
Mid 1970s – 1990s

Rationalist thought
late 1980s – 1990s


Public Economic Development Agencies
Regulatory Economic Development, Mixed economic Development

Focus on Value-adding strategies. Incorporating workforce and technology change

Initiatives to reduce social disparities by incorporating disadvantaged groups into the mainstream economy

Initiatives to improve environmental and overall quality of life to attract highly skilled workers and firms

Sustainable development

Focus of Economic Planning Strategy

Comparative Advantage → Competitive Advantage ← Collaborative Advantage

Master Planning Infrastructure oriented
Goals and Objectives Planning
Structure Planning
Strategic Planning
Integrated Strategic Planning
Multi sector Integrated Strategic Planning
The paper discusses a number of important issues that are evident in the context of those evolutions in paradigms.

- First, there is a discussion of neo-classical economic theory as the basis of regional development theory.

- Second, there is a discussion of the evolution of economic policy from Keynesian thought and the associated master planning paradigms to monetarism and economic rationalism and the associated goals and objectives and strategic planning paradigms.

- Third, there is a discussion of the shift over time from a focus on comparative advantage to competitive advantage and more recently to the notion of collaborative advantage.

- Fourth, there is a discussion of the processes of globalization and the emergence of concern for achieving sustainable development, and the focus on regional self-help in the pursuit of endogenous growth.

- And fifth, there is a discussion of the evolution of the ‘new growth theory’.
Some implications to draw from that discussion

- At one time regions were protected from outside competition, and to some extent their economies were able to be manipulated by national governments.

- But that is no longer the case as the economic rationalism pursued by many national governments left many regions to fend for themselves.

- Regions still continue to look to higher levels of government for support and resources to provide economic direction and investment to stimulate economic development.

- However, unfortunately, many regions fail to understand that globalization has left such governments largely devoid of powers to apply economic and policy mechanisms to enhance the competitiveness of region economies.
Thus, as stated by Stimson, Stough and Roberts (2006)....

.... “today it is more and more up to regions to develop and use their own devices to compete internationally in order to survive. That is, a reliance on endogenous processes is typically espoused in regional economic development policy. To do so regions need first to understand what the factors are that set the dynamics of the emerging new economic age of the 21st century”.
So, what can we conclude so far?....

- It is evident that there have emerged a number of key themes as to what constitutes:
  - *regional growth and development*; and
  - *regional competitiveness*.

- Not surprisingly there are differences of views among regional economic development scholars, and some of those differences relate to the relative focus given to:
  - the roles of *exogenous* forces on the one hand, and
  - the roles of *endogenous* processes and factors on the other hand.

- But there does now seem to be an almost universal realization of what Garlick, Taylor and Plumber (2006) refer to as the *institutional embeddedness* of *endogenous* processes and factors in regional development.
Cont....

- Of course *exogenous* factors do remain important to a region’s economic performance and how it develops over time.

- But...
  
  .... increasing importance is being placed on *endogenous* forces as determinants of a region’s competitiveness.

- However, regional economic development policy initiatives now tend to be more oriented towards measures that:
  
  - enhance *local capacity and capability* for a city or region to develop; and
  
  - assist regions to cope with rapid change in an increasingly competitive global environment.

- While endogenous growth theory makes mention of *leadership*, *entrepreneurship*, and *institutional factors*, little systematic analysis has occurred to thoroughly conceptualize or, even more, measure their roles as endogenous factors in the development process.
A new model of endogenous regional economic growth and development

In a recent series of papers Stimson, Robson, Stough and Salazar (2003), and Stimson, Stough and Salazar (2003; 2005) have developed a new model framework of endogenous regional growth and development.

That framework explicitly incorporates:
- leadership
- entrepreneurship
- institutional factors

as *intervening variables* that are hypothesized to have a catalytic impact on the regional growth and development process.
A ‘virtuous circle’ for sustainable development (Stimson, Stough and Salazar, 2005)

- Strong proactive leadership
  - Good use and tapping of potentials
  - Sustainable development
  - Vision for future development
  - Strategy, plans, processes
  - Facilitate institutional change to enhance regional capacity and capability
  - Effective institutions and regional infrastructure
  - Resource endowments
  - Market conditions
  - Mechanisms for using and tapping
A ‘virtuous circle’ for Sustainable Regional Development

- The ‘circle’ is maintained by effective leadership as it is used to change and adjust institutions in order to adapt the structure, processes and infrastructure of a regional economy in a way appropriate and needed to:
  - meet and anticipate changing circumstances
  - facilitate the optimal use of its resource endowments
  - assist industries to tap their full market potential.

- Strong leadership means a region will:
  - be proactive in initiating regional economic development strategy to monitor regional performance
  - set a vision for its future development
  - implement processes and plans that will facilitate institutional change.

- That, in turn, will enhance the capacity and capability of the region to:
  - positively adjust to changing circumstances
  - attain a good fit with market conditions
  - harness its resource endowments

in order to maintain and improve its competitive performance and to achieve sustainable development as a learning region.
A model for endogenous regional growth and development


- Operationally, that model may be represented as:

\[
RED = f \left[ RE, M \ .. \ mediated \ by \ .. \ (L, I, E) \right]
\]
A new model framework for the regional economic development process

Quasi-Independent Variables

Intervening Variables

Dependent Variable(s)

The dynamic interrelationships that act to create the catalysis for regional development

(I) Institutions

(E) Entrepreneurship

(L) Leadership

Resource Endowments and Market Conditions (RE,M)

OUTCOME
A Region that is: Competitive Entrepreneurial Sustainable (RED)

Measure and evaluation change over time.

Benchmark performance (e.g. Regional shift component in shift-share analysis)
The outcome of the regional economic development process (RED) is the degree to which a region has achieved competitive performance, displays entrepreneurship, and has achieved sustainable development.

Those outcome states are defined as the dependent variable(s) in the model.

An outcome state is conceptualized as being dependent on a set of quasi-independent variables relating to a city or region’s resource endowments and its ‘fit’ with market conditions which, for convenience is separated into its two components (namely RE and M).

That is mediated through the interaction between leadership (L) and institutions (I) to facilitate or suppress entrepreneurship (E).
A model for endogenous regional growth and development, cont....

The new model framework proposed incorporates both direct and indirect effects in the interactions between $RE,M$ (the quasi-independent variable) and $L, I$ and $E$ (the intervening or mediating variables).

Also, the interactions between the intervening or mediating variables $L, I$ and $E$ may be both direct and indirect.
The dependent variable: measuring endogenous growth

- Approach by Stimson, Stough and Salazar (2005) to measure the RED variable performance across the regions of a state or a nation as the dependent variable in the model.

- A simple surrogate measure of endogenous growth is proposed.

- The regional shift or differential shift component derived from a shift share analysis of regional employment change over time by summing the regional or differential employment shift across all industry sectors standardized by the size of the regional labor force.
Potential independent and intervening variables

- Quasi independent variables:
  - $RE = \text{resource endowments}$
  - $M = \text{market fit}$

- Intervening (or mediating) variables:
  - $L = \text{leadership}$
  - $E = \text{entrepreneurship}$
  - $I = \text{institutions}$
Re = resource endowments

- area size of the region
- climate
- topography
- agglomeration of industry key sectors (measured by Location Quotients for employment in industry sectors)
- population size and rate of growth/decline
- education levels (a derived index of human capital) and literacy
- per capita income, income distribution, and income distribution change over time
- housing ownership
- investment in industrial and commercial construction, benchmarked to the region’s national share vis-a-vis its national share of population
- infrastructure investment (per capita), such as on roads, schools, hospitals, etc
- industrial structure and change in industrial structure (measured by an industrial diversity index)
- regional organizational slack
$M = \text{market fit}$

- basic economic activity in major industry sectors (measured by Location Quotients for employment in industry sectors)
- airline connections with other regions/cities
- road freight in/out movements
- volume and value of exports in key products and services
$L = \text{leadership}$

- the degree of change/stability in local political leadership
- expert assessment of leadership quality
- corporate headquarters located in the region
- density of business and community organizations per 10,000 population
$I = \text{institutions}$

- institutional thickness (corporate and community organizations per 10,000 population)
- layers of government/government fragmentation
- formal institutions of governance, measured by number of public agencies per 10,000 population
- number of headquarters of major corporations (e.g. Fortune 1000 firms)
- value foundation capitalization per 10,000 population
- government fragmentation
- level of regional organizations (number and budget level)
- index of social capital
$E = \text{entrepreneurship}$

- churn rate or business start-up rate
- venture capital activity
- corporate venturing activity
- patents issued per 10,000 workers
- Location Quotient of employment in ‘symbolic analyst’ occupations
The model

- Stimson, Stough and Salazar (2005) argue that RED is positively related to \( RE, M, L, I, \) and \( E \)

- But: there are likely to be lead and lag effects in the short to intermediate run, and perhaps cyclical effects in the longer run.

- Thus...

\[
RED_t = RE_{t-1} + M_{t-1} + (I_{t-1} \text{ to } I_{t-10/10}) + L_{t-2} + E_{t-2} + e
\]
Towards a new paradigm for endogenous regional growth and development planning strategy

- Traditional models of regional economic growth and development and traditional modes of regional analysis remain important and useful as means of addressing regional economic change.

- But...
  - the emergence of the ‘new growth theory’ and the emphasis now being placed on the importance of endogenous processes in regional growth
  - the increasing concerns over sustainability in regional development strategy planning

  required a new framework for approaching regional economic development planning strategy formulation.

- That has resulted in the emergence of new integrated approaches to regional development policy and planning strategy.
Towards a new paradigm for endogenous regional growth and development planning strategy, cont....

- In arguing the need for an emerging paradigm of regional economic development planning, and to assist regions to undertake the processes involved in regional economic development strategy, it is important:
  - to identify the key elements for regional economic development strategy building and implementation
  - place those in a process that pulls together resources, infrastructure, social capital, and technology

  to facilitate the economic development of a region in a dynamic and globally competitive environment.
Process for a contemporary approach to regional economic development

1. Analyse and Appraise Regional Economic Performance and Competitiveness using Benchmarks
2. Establish a Strategic Platform for Regional Change and Development
3. Develop and Implement Strategies to Enhance Industry Cluster Formation and Growth Building on Regional Core Competencies and Appraisal of Regional Risk to Create a Competitive Region
4. Monitor Regional Performance and Competitiveness and Review Strategy using Benchmarks
That approach suggests that the intent of regional economic development strategy might be to:

- Establish a platform for change to guide the development of a region and to facilitate its competitiveness in a global environment in the pursuit of a sustainable future.

- Mobilize key actors or facilitators and agents of change, through partnership approaches encompassing strategic alliances and partnerships between business, markets, government and community.
The framework proposes the following....

- Identify, describe, analyze and evaluate:
  - core competencies
  - resource endowments
  - infrastructure competitiveness
  - market intelligence,
  - regional risk
  through the combination of qualitative and quantitative methods encompassed in:
  - industry cluster analysis (ICA)
  - multi sector analysis (MSA) (see Roberts and Stimson, 1998).

- Identify and evaluate economic possibilities for the future leading to the statement of strategic intent.

- Evaluate alternative development futures or scenarios through the participation of stakeholders within the region and external to it to encompass the assessments of key decision-makers controlling capital, trade and other flows to the region.
Implementation plans and mechanisms need to be developed and put in place by appropriate agencies in the region.

Progress made towards achieving the ‘desired development future’ needs to be monitored. That:

- requires agreement on indicators and benchmarks against which to measure and evaluate regional performance over time in order to assess the degree of success of the strategy and progress towards achievement of the strategic intent.

- involves building enhanced regional infrastructure systems along with strengthening existing and building new partnerships, networks and alliances.

In the contemporary era of the global economy, increasingly the pursuit of regional economic development also needs to take place within the context of principles for achieving a sustainable future.
Steps involved in implementing the new framework for regional economic development planning strategy

1. Establishing a Platform for Change
2. Economic Audit Analysis
3. Regional Information System
4. Indicators & Benchmarks
5. Agents of Change
   - Business
   - Markets
   - Government
   - Community
   - Technology
6. INDUSTRY CLUSTER ANALYSIS (ICA)
7. Economic Possibilities Index
8. DEVELOP AND TEST ALTERNATIVE ECONOMIC FUTURES
9. Set (new) Strategic Directions
10. Redefine Directions
11. STRATEGY
   - Strategic Intent
   - Strategic Directions
   - Strategic Architecture
   - Economic Drivers

ACTION PLAN
- 5 year rolling Plan
- Annual Plan
- Financial Plan