February 15,2024

The Interrelationship between Innovation, Productivity and Competitiveness

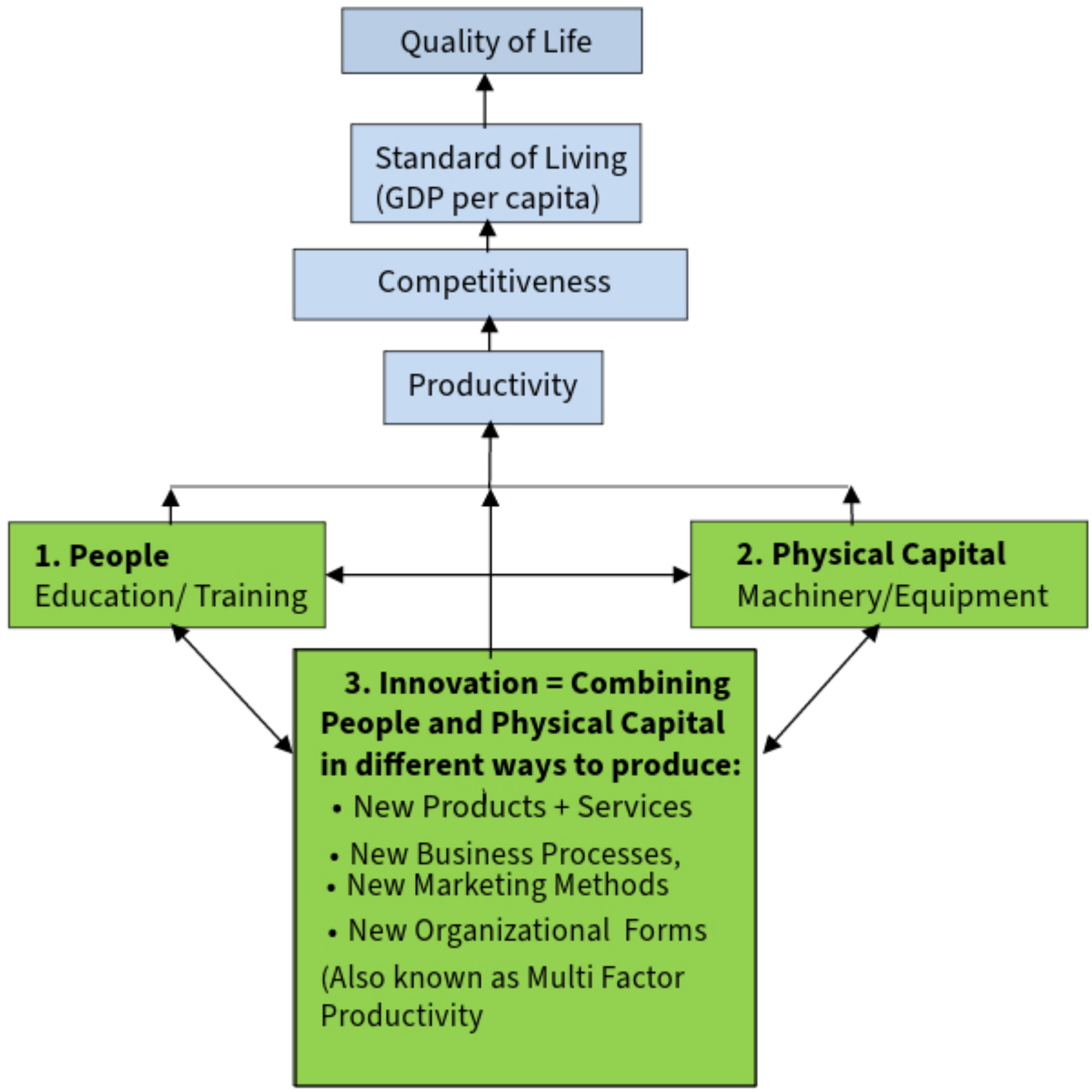
Here is a summary of the Economic Logic of Productivity, building on previous Department of Finance Budgets, focusing on interconnections among the three concepts of innovation, productivity and competitiveness.

Governments are mandated to improve the Quality of Life of their Citizens. Improving the Quality of Life of a population requires investments whose sustained affordability depends on a country's Standard of Living (GDP per capita). The standard of living of a country is, in turn, dependent upon how competitive its economy is in producing goods and services for domestic and global markets. In turn, the long term competitiveness of an economy depends upon the productivity of its workforce. And the growth in its productivity depends upon three activities:

1. Public and private investments in People (education/training – e.g. new digital skills),
2. Public and private investments in Physical Capital (latest machinery, technology and equipment – e.g. disruptive digital technologies) and
3. Public and private investments in Innovation (creating new products, services, business processes, and business/marketing structures).

February 15,2024

Figure 1: Federal Economic Logic Model



As a result, to grow an economy requires concentrating public and private investments in these three components: People, Physical Capital, and above all in Innovation. This latter activity means combining People and Physical Capital in innovative ways inside Canadian Firms to produce:

1. New Products + Services
2. New Business Processes,
3. New Marketing Methods
4. New Organizational Forms

All of these types of business innovation can **assist firms to be successful in domestic and global markets.**

As a result, these three categories of investment in productivity are the primary source of a country's competitiveness, standard of living and quality of life.

One key factor to note, relative to this economic logic of productivity, and which advisors frequently overlook, is that productivity is a measure of "volume" as well as "quality".

1. **People/Labour**. So how do you increase both widespread participation in the labour force (for example expanding immigration, or Freeland's daycare for women initiatives do help) as well as quality through higher education, constant training and re-skilling.
2. **Capital**. And on the capital side of the equation – "how much" capital is a country employing in its production processes including digital capital and, is it "best in class"?
3. **Innovation**. The third leg of the productivity equation (Multi Factor Productivity) is key– **how does an organization experiment constantly** to combine Labour and Capital in different "recipes" to produce innovative goods, services or processes that are used in either a firm, or industry, a country or globally. Note that innovation is not complete until it is "used" i.e. consumed in the marketplace by someone to extract its value (otherwise it's just sitting in inventory). **Innovation Impact** is the result that is produced from consumption.