

## Chapter 7.15

# The Influences of Savings and Investments on Sustainable Development and the Role of Information Technology

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### ABSTRACT

This chapter investigates how the combination of savings and investments affects economic development and sustainability. This discussion aims to help to understand the role of savings as a support to growth, and how biasing individual decisions on consumption and debt via monetary policies can be a source of economic growth unsustainability. Information technology helps to optimise the use of resources, but it even makes dangerous policies easier to implement. Section 1 shows theoretical insights into the contribution of savings to growth, and the concept of sustainability; section 2 focuses on the theories that better deal with the sustainability concern and

investigates the role of information technology in monetary policy; section 3 shows the growing, positive contribution of e-money to growth and sustainability, and it suggests a new role for the government as advisor within an information-enhanced economy where information technology can play a prominent role; section 4 concludes.

### INTRODUCTION

This chapter wants to expose the main threads of economic theory analysing the role of savings and investments within the perspective of economic development (which I refer to in terms of GDP growth) and sustainability (which I refer to in terms of GDP variability, including “crisis” phenomena). Information Technology can affect

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the way savings and investments interact, hence contribute to determine the economic outcome in terms of sustainable development in a way other than the commonly discussed industrial dynamics.

*Classical* and *Keynesian-like* analyses differ by the value recognised to savings: the former acknowledge the role of savings as funds available to investments, the basis for the future economic development, while the latter stress that savings can work as a brake to economic growth by means of the idle productive capacity. But both threads miss the time-frame of production, which lets them lose insight into phenomena such as economic cycles; Austrian economic theories can give a wider perspective on economic cycles, offering a causal link between economic phases. Any different theoretical framework involves a different key to interpret the role of Information Technology. A careful look into the basics of Austrian theories reveals the up-to-datedness of “pure credit” models, which show what part of growth un-sustainability can stem from monetary policy. As Information Technology has made money circulation much faster, it has made monetary policy an even more effective source of cycles.

The chapter aims to introduce the main views on economic growth, to show that economic development and sustainability are problems deeply interconnected, and can be effectively explored thanks to business cycle theories; according to this opinion, savings are much more important than what mainstream economists claim with their imperative attention to consumption, and Information Technology is a very important tool for the underlying mechanisms to be more fluid and effective. These considerations can be used to revise the institutional design of monetary and fiscal interventionism.

## BACKGROUND

How savings and investments combine, and what the outcome in terms of economic development

and sustainability is, is a topic faced throughout the whole history of economics. Any school, from A. Smith (1776) *Laissez-faire* to C. Marx (1887) *Communism*, through M. Friedman (1968) *Monetarism*, F.A. Von Hayek (1933) *Business Cycle theory*, and J.M. Keynes (1936) *General Theory*, as well as their recent heirs, have either explicitly or implicitly exposed their own ideas and suggested their own policies for the economy to grow in a sustainable way. To simplify the exposition of the chapter, I have chosen to divide the economic knowledge and schooling into two main classes, which I call “*classical*” and “*Keynesian-like*” perspectives, on the basis of the different approaches to “*idle productive capacity*” and “*economic cycles*”, concepts that I will explore in the chapter.

The present chapter moves from the basic idea that economic development depends mainly on investments. This causal link is mostly accepted in literature; for instance P. Romer (1994) analysis on the determinants of economic growth has the stock of capital (the sum of previous investments) as an important variable. Another important variable is the “human capital”, which can be considered as investments in worker skills. For an economy to grow, it must hold enough instruments to work, and enter them into the productive process for the final goods to get completed.

Beside all the problems involved in the right choice of the investment to do, it is taken for granted that even the mere level of aggregate investment (like in Romer’s models) affects how the economy develops; economic development may be considered both *qualitatively*, when the range or quality of “goods” (from here on, I will say “goods” for both goods and services, anything that can be produced or arranged to be exchanged for money) is under scrutiny, and *quantitatively*, when the focus lies on the increasing of economic activity. The latter point of view implies economic development to be intended as “*growth*”, so it can be measured via an index such as the (real) Gross Domestic Product (GDP). For the discussion to be led with due simplicity by the use of some macro-

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