Chapter 9
ICT Investments and Recovery of Troubled Economies

Ioannis Papadopoulos
Metropolitan College Thessaloniki, Greece

Apostolos Syropoulos
Greek Molecular Computing Group, Greece

ABSTRACT

The economy of any country can thrive, decline, or remain steady. A declining economy is a troubled one, and it is necessary to find ways to reverse its course. Naturally, there is no single recipe to put a troubled economy back on track, but innovation and technology always help an economy to boost itself. In particular, information and computer technology (ICT) and innovations are very relevant today since almost everything (people, companies, products, etc.) have a digital identity. Thus, investing in ICT can help a troubled economy to recover. More specifically, countries with deep fundamental problems like Greece can be benefited by a wide adoption of ICT.

INTRODUCTION

Over the last few years, many countries faced an unprecedented crisis that negatively shaped their economic and social landscape. Here, the term "crisis" means a general turbulence in economy, which is expressed through various negative events in the public and the private Sector of the economy. Common denominator is the radical increase of unemployment that leads to negative social phenomena, poverty and forced immigration. The discussion that follows is based on (Blanchard & Johnson, 2012).

Indicatively, in Public sector we have reduced GDP (Gross Domestic Product - the total amount of values produced in economy in a year) that is usually translated into potential personnel reductions (or in the best case there are no new hirings). Salaries and pensions are suffering cuts, and the same holds for the budget of public investments (new roads, hospitals, schools, etc.). Additionally, the state faces difficulties in supporting the public debt [the accumulated amount of money that the state has borrowed in the past (loans) from international financial markets in order to support its everyday needs that also include paying back other older loans], constant deficits (the public spending is higher than the collected

DOI: 10.4018/978-1-5225-7766-9.ch009

taxes) and incapability of borrowing new loans from international markets. This happens because of the insolvency of the country based on the fact that the annual debt payments due are not supported from the overall operation of the whole economy and from its future development prospects. Accordingly, in the private sector, firms face reduced demand for their products, difficulties in borrowing money from banks, increased tax payments and other negative facts that lead them to reduce personnel, reduce their program of investments and hold money because of the uncertainty prevailing in economy.

The opposite of crisis is development. The term "development" means the expansion of an economy (i.e., new jobs, increasing of salaries and pensions, new public and private investments, new prospects and other positive social and economic events).

One of the most important elements of this brief analysis is the term investment. In simply words, an investment is a dedicated amount of money used to create something, with the hope that this will return in the future some profit (typically a multiply of the initial amount) and will support the economy in its expansion. It is the cornerstone of the prosperity of a society and an economy. Investments are separated in public (roads, schools, energy infrastructure, hospitals, etc.) or private ones (new buildings, new businesses, new production lines, collaboration with public sector, etc.). Development of an open economy can only be achieved through investments. In other words, investments are done so to create wealth. Investments in *information and computer technology* (ICT henceforward) are highly important because they facilitate transactions, reduce bureaucracy and accelerate the operational procedures of state and businesses.

The global financial crisis of 2008 triggered a chain of events that revealed many long term structural problems well established in the foundations of the economy of a series of countries such as Greece, Ireland, and Portugal. Such problems were well hidden for many years and because of the global prosperity their importance was underestimated. Because of this, they could not affect the basic economic figures. Such countries had the ability for years to receive loans from international markets (large investment banks such as Goldman Sachs or JP Morgan) and with this method they could proceed in their everyday operational function. But after the crisis of 2008, the matter of insolvency (the degree to which a country is capable of paying back their loans) turned into a highly significant factor. Based on this, the following chain was triggered:

- The global financial crisis (which was primarily initiated from the collapse of the 4th largest investment bank in the USA, Lehmann Brothers) led to solvency crisis.
- The solvency crisis led to a borrowing crisis (global markets were not willing to borrow some countries because of the doubts they had over their ability to pay back these loans).
- Therefore some countries were not able to receive new loans from financial markets.
- This situation led to a debt crisis, meaning that these countries were not able to receive new loans in order to pay back older ones.
- Eventually, the debt crisis led to public expenditures cuts and an increase of taxes which in turn led to an economical and social crisis.

BACKGROUND

The declination of an economy can be triggered from various factors. Officially it is said that an economy declines (i.e., is getting into recession) if the GDP in two consecutive quarters has a negative growth.

Related Content

Relationships between Micro-Enterprises and Web Developers: Roles, Misconceptions and Communication
Robert J. McQueenand Nordiana Daud (2013). *International Journal of E-Entrepreneurship and Innovation (pp. 28-42).*
www.irma-international.org/article/relationships-between-micro-enterprises-and-web-developers/81262

Combining Technologies' Properties to Cope with Uncertainty: Lessons from the Military
Cécile Godéand Pierre Barbaroux (2016). *International Journal of E-Entrepreneurship and Innovation (pp. 1-18).*
www.irma-international.org/article/combining-technologies-properties-to-cope-with-uncertainty/167798

Call U Back: An Agent-Based Infrastructure for Mobile Commerce
Xining Liand Jiazao Lin (2011). *International Journal of E-Entrepreneurship and Innovation (pp. 1-13).*
www.irma-international.org/article/call-back-agent-based-infrastructure/55116

To Take or Not to Take?: The Importance of Business Ethics
Katarzyna Lipskaand Emilia Kijanka (2019). *Handbook of Research on Ethics, Entrepreneurship, and Governance in Higher Education (pp. 137-155).*
www.irma-international.org/chapter/to-take-or-not-to-take/212006

Transformational Leadership and Innovative Work Behavior of Employees: Two Sides of the Story
Jana Deprez, Wouter Robijnand Martin Euwema (2023). *Embracing Business Sustainability Through Innovation and Creativity in the Service Sector (pp. 221-236).*
www.irma-international.org/chapter/transformational-leadership-and-innovative-work-behavior-of-employees/320592