

# The form the financial crisis. the following

[Business](#), [Industries](#)



The financial crisis and its impact on ICT

1. Introduction When dealing with ICT and its impact on the economy most views remain strictly optimistic. On the other hand, there are often uncertainties regarding the legitimacy of claims that ICT is actually such a determining factor in the recovery from the financial crisis. The following paper deals with the hypothesis that ICT and especially the mobile telephony sector helped recover from the financial crisis. It also discusses several benefits of investments towards ICT and mobile telecommunication in particular, finishing up with a conclusion. Firstly, the paper gives a brief insight into methods of research considering the financial crisis.

Then it briefly introduces the financial crisis and how it impacted ICT.

Secondly, the paper will discuss how and if ICT is a viable solution in aiding the recovery from the crisis.

1. 2 How research is done in the field The impact of the mobile phone industry on the financial crisis and especially the recovery from it, is mostly described through scientific research is done through induction done by empirical observations.

In this case empirical observations are gathered through field research aimed towards finding and enforcing hypothesis in macro theory. The data needed for the induction in this case is provided by countless entities such as the World Bank, Analysts (Like Pyramid Research), entities in the mobile industry (GSM Association and ITU International Telecommunication Union) and several others.

1. 3 The economic crisis The financial crisis in 2008 has been the worst financial crisis since the Great Depression in the 1930s. The crisis cannot be traced to a single event, it was a result of a number of events. The beginning of the crisis was caused by the exorbitant lending of subprime

mortgages in the US market (ITU, 2009). As consequence, investors lost confidence in the mortgage and loan markets. This developed into a global banking crisis with the bankruptcy of the investment bank Lehman Brothers.

Due to the close interaction of banks across the world the crisis was followed by a decline of the international economy and a global liquidity crisis. A well representing, often used symbolism for the economic crisis is a growing soap bell which pops after a while when it has grown too big. 1. 4 The impact on ICT Due to the financial crisis, the industry has experienced decreasing demand, operational cutbacks and reduced investment (ITU, 2009). But in comparison to most other industries, the area of mobile communications has been proving to be more flexible. In the financial crisis of 2008 the ICT sector has had a role as both villain and hero (ITU, 2009). On the one hand, it was acting as a leading indicator of decline while on the other hand also proving to be an important power assisting the recovery of the economy.

In 2009 the typical American wireless user interacts with wireless technology via a cellular telephone and about 90% of U. S. citizens use a mobile device actively (ITU, 2009). In contrast to this, Greece is experiencing a mobile penetration rate of larger than 200% (ITU, 2009). This means that on average every Greek inhabitant has two devices connected to a mobile network. These statistics show how explosive the expenditure of the mobile phone market is. 1. 5 Impact on Demand The financial crisis had a huge impact on most industries all over the world.

In contrast to that, the mobile market in developing countries remained growing. For example, the two largest developing countries China and India.

China mobile, the world's largest mobile operator added 74 million additional mobile users in the year through October 2008 (ITU, 2009). In India, the world's second largest market 10. 4 million additional mobile subscriber were listed in October 2008 (ITU, 2009).

In Brazil, the number of subscribers rose by 4 million in October 2008 which is more than twice as much as in October 2007 (ITU, 2009). As these data show the mobile growth of developing countries has been weakly influenced by the financial crisis and even further increased after the crisis. On the other hand, the general demand in most industries decreased because of less income per head. Less expensive purchases were done in mobile phones and operators. This was also partly due to the fact that people did not want to freeze expensive monthly deals for 2 years.

This indirectly stimulated the economic crisis as it is a downward spiral.

1. 6 Impact on supply The Supply of the mobile industry is mainly influenced by the expenditure and investments in telecommunication networks. Due to the financial crisis, the capital expenditures decreased.

These expenditure cuts mainly influenced developed countries that triggered the crisis. In contrast to developed countries the developing countries, also called "the home of the next billion subscribers" (ITU, 2009), have the potential of untapped demand. Therefore, it is very unlikely that investors will cut investments in markets with such high future potential (ITU, 2009). The impact of ICT on the economy 2. 1 Returns on investment in ICT The ITU emphasizes the power of investing in ICT and the importance of ongoing investments from the government and the private sector. With the

rising demand on internet access via mobile devices the industry relies on investments to stay ahead with spare capacity concerning internet use. The increasing importance of the internet as a prerequisite for the ability to participate in the current information economy has led to a widespread acknowledgement of the power of ICT investments.

The provided graph in Figure 1 shows how economic growth can be stimulated through different ways of telecommunication penetration (ITU, 2009). One further mean of return is the so called multiplier effect. In this case it depicts how initial government investment leads to repeated rounds of income spending. According to Statistic Networks Group secondary investments resulting from broadband investments are ten times the initial amount while the contribution towards GDP could be fifteen times as high. Generally, investments towards any sector in ICT bears high returns as well as great possible benefits to society like robust and durable economic growth, the ability to create more skilled personnel for the future and greater productivity gains (ITU 2009). 2. 2 Economic growth through ICT ICT is considered to be one of the main forces driving economic growth (Pohjola M, 2002). ICT has the answer on almost every question asked.

The mobile phone industry as a part of ICT has continued to show steady growth despite the financial crisis unlike many other ICT industries that lack demand during times of financial constraints. The positive impact of mobile telecommunication on economic and productivity growth was proved by several studies, one in particular being by Gruber and Koutroumpis (Gruber H, Koutroumpis P, 2010). Extensive research looking at real GDP per capita

and ICT use index have shown that an improved ICT use leads most likely to an increase in economic growth (Farhadi M, Ismail R, Fooladi M, 2012). This becomes increasingly apparent when looking at equipment sales which have been hit by the financial crisis.

In contrast, the provided services of the mobile industry are doing much better. The amount of mobile cellular subscriptions reached 67 percent of inhabitants globally at the end of 2009 (ITU, 2010) and only a small number of countries are seeing reductions in their number of subscriptions. Especially the developing countries for example Latin America are predicted to have a fast-growing smartphone market where the sale of mobile phones is expected to rise from 7 million smartphones in 2009, or 5.4 percent of total handset sales, to 48 million in 2014, or 30 per cent of the total (ITU, 2009).

Additionally, the growth in the mobile phone industry is driven by large emerging markets like India and China and the overall consumer willingness to spend parts of their income on mobile services despite times of financial constraints.

During the development of the ICT sector, maximum growth of the economy is trying to be reached. However, this process gets decelerated by environmental consequences and restrictions. As some decisions may seem to be a good idea for the company or organisation itself, it turns out to be unprofitable for society and environment. Due to these restrictions, only partial economic growth can be achieved (R. Evenson, 2015).

2.3 The impact mobile money transfers. But this growth potential is not restricted solely to developed countries. The World Bank mentions for

example that in a typical developing country an extra ten phones per 100 people would be able to grow GDP by 0.8 percent. In these countries, mobile phones offer economic empowerment through its compensation for poor infrastructures. In general, mobile phones enable a faster and freer flow of information resulting in more efficient markets. An explicit example for this is the emergence of mobile-money services in Africa.

In one case Kenyan households were able to increase incomes by 5-30% solely through the use of mobile banking (a service called M-PESA) (Tavneet Suri, 2016) 2. 4 Conclusion Considering the observed evidence, we conclude that mobile telecommunication plays a vital role in the ICT industry.

Investments towards this technology should be supported by governments in developing as well as developed countries since it seems safe to say that they lead to economic growth and increased efficiency. Also, ICT and especially mobile technology enable individuals in the economy to keep on participating in global trade and compensate for lacking infrastructure.

Especially the ICT sectors of developing countries remained stable after the crisis in comparison to the developed countries. The demand kept stable after the crisis and it was possible to also keep the supply stable because the developing countries build an attractive market to invest in due to the potential of the untapped demand.