

Laudatio for the Laurea ad Honorem, Prof. Joseph Stiglitz

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Joseph Stiglitz is Professor of Economics at Columbia University in New York.

Professor Stiglitz received his PhD from the prestigious Massachusetts Institute of Technology (MIT) in Boston and has taught economics in important American universities such as Princeton, Yale and Stanford.

To understand the impact that Prof. Stiglitz has had in the development of the economic discipline, it is enough to mention that he was the winner of the John Bates Clark medal awarded by the American Economic Association to economists under 40 who made the most significant contributions to the field. The motivation for the award reads: *“Stiglitz is beyond compare among younger economists for the range and variety of his theoretical achievements, as well as for their vigor and their liveliness. From growth and capital to the economics of discrimination, from public finance to corporate finance, from information to uncertainty, from competitive equilibrium with exhaustible resources to monopolistic competition and product diversity, contemporary economic theory is crisscrossed with his footprints.”*

Prof. Stiglitz has written a vast amount of studies published on the most prestigious international journals, with an impressive number of co-authors from all over the world.

However, his contributions are not limited to the academic realm. Prof. Stiglitz has also been economic advisor of the President of the United States Bill Clinton during his first mandate and, from 1997 to 2000, Senior Vice-President and Chief Economist at the World Bank.

In 2001 Prof. Stiglitz was awarded the Nobel Memorial Prize in Economic Sciences together with George Akerlof and Michael Spence. Among the key motivations for the prize there is an explicit reference to the contribution given to the “analyses of markets with asymmetric information”, confirming the fundamental role of Professor Stiglitz in the development of a new field, the economics of information.

His research on the economics of information has shown systematically that, whenever information is imperfect, and especially in the presence of information asymmetries – such that in an economic exchange only few agents have access to some knowledge that others ignore – the market through its invisible hand does not work at all. In the absence of adequate regulation and public intervention, markets

with information asymmetries are incapable of achieving an efficient economic allocation.

In his work on the relationship between types of information and agents' behaviour, prof. Stiglitz has thus contributed to profoundly change economic thinking, opening new analytical perspectives and subverting some of the cornerstones of classic economic models.

Up until the early '70s, economic theory acknowledged the importance of information for decision-making, but never tried to formally incorporate it in its workhorse models. Neoclassical economics, therefore, separated those problems related to efficiency – that could be handled in a perfectly competitive market – from equity issues – that would be managed through some form of redistribution. Modern theories of economic asymmetries, instead, disrupted this expectation, and demonstrated that even small information asymmetries could have dramatic consequences on the smooth functioning of markets, and thus require some degree of public intervention.

One of the key contributions of prof. Stiglitz has been the extension of the analysis of inefficiencies stemming from imperfect information to various markets (labour, credit, capital markets), trying to establish a new macroeconomic vision grounded in these information asymmetries. All starting from a Keynesian view of capitalism, which according to Prof. Stiglitz is by far a deeper conceptual framework compared to classical macroeconomics.

His contributions are not limited to strictly theoretical aspects of so-called market failures but have moved onto issues of ever-increasing practical and policy relevance after his experience at the World Bank.

In his most recent work, there are at least three main areas of contribution to economic theory.

The first theme is the analysis of globalization and its effects. In particular, Prof. Stiglitz has questioned some of the fundamental concepts behind globalization, such as the fact that free trade *per se* should increase welfare. According to Prof. Stiglitz, the current wave of globalization is generating high inequality both across and within countries. Even if new wealth is indeed created, too many countries and people do not benefit from it and have no voice in the decisions that can steer this process.

In his book *Making Globalization Work* (2007), Prof. Stiglitz says: “We can restructure globalization so that those in both the developed and the developing world, the current and future generations can all benefit - though there are some special interests who will lose out, and they will resist these changes. We can have stronger

economies *and* societies that put more weight on values like culture, the environment and life itself”.

This message leads us to emphasize a second key contribution of Prof. Stiglitz. In January 2008, the French President Nicolas Sarkozy asked a commission presided by the Nobel Prize winners Stiglitz and Amartya Sen to study and propose alternative measures to Gross Domestic Product (GDP), the most used measure of economic development, an analysis recently carried on in an High-Level Expert Group at the OECD.

Despite the complexity of the problem, this commission has provided several operational recommendations: for instance, material well-being must be evaluated at the household level, considering income and expenditure rather than production, as it is now typically done with GDP. There must be a greater focus on income, consumption and wealth distribution: an increase in average GDP does not necessarily indicate greater income for all. Moreover, the commission recommended to consider various other socio-economic indicators to characterize a country, such as education, health, the quality of democracy, social networks, the environment and sustainability, and security. These are fascinating topics, quite hard to include but of fundamental importance for a more appropriate measurement of a country’s welfare, not necessarily expressed in monetary terms.

Last but not least, a third area in which Stiglitz’s contributions are particularly enlightening are on the impact of technology on society, a central point for debate in this Festival organized by the Politecnico di Torino.

According to Prof. Stiglitz, new technologies have the potential to improve enormously our lives, but only if the giant corporations that currently control those technologies will follow appropriate rules. “What we have seen thus far is absolutely inadequate”, said Prof. Stiglitz in a recent interview.

In particular, Prof. Stiglitz has recently studied the role of artificial intelligence and its effect on markets, especially the labour market. Prof. Stiglitz makes a distinction between AI that can substitute workers and AI that helps workers doing a better job.

Beyond the effects of AI on the labour market, Prof. Stiglitz is also considering other more subtle and insidious forces. With the help of AI, technological enterprises can use personal data from online searches, purchases or social interactions to better understand who we are. This data can offer more tailored services, but this is only one side of the coin, while on the other hand it is also possible that this data will be used against us. We need, therefore, new data protection policies and regulations to ensure an adequate development of these new markets.

Once more, there is a growing necessity to define a new, complex but essential equilibrium between markets and state interventions, needed to guide the future evolution of society.

All of the aforementioned themes are and have always been at the forefront of the academic curriculum taught in the Engineering and Management degree here at the Politecnico, a rapidly growing study-course that combines technological expertise with socio-economic, legal and managerial competences. For this reason, the Faculty and Department of Management and Production Engineering, with the Magnifico Rettore, are pleased to award Prof. Stiglitz with the degree *ad honorem* in Engineering and Management.