

# Quality Movement in Eastern Europe's Manufacturing Sector from the End of World War II until Present Days: The case of Bulgaria

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## **PH.D. THESIS SUMMARY: Quality Movement in Eastern Europe's Manufacturing Sector from the End of World War II until Present Days: The Case of Bulgaria**

**[Opening]** Since early days, product quality has been detrimental to trade and income, and in the case of emerging economies, it remains at the very core of competitiveness (Pooley and Welsh, 1994; Matei and Lazar, 2011; Racine, 2011). Yet, product quality cannot be taken for granted, and as a factor of competitiveness, it has a number of prerequisites, one of them being the presence of effective quality management practices (i.e. Total Quality Management, Kaizen, and Six Sigma). For example, those, who are aware of Japan's unprecedented success in product quality upgrading after the end of WWII, know that it was the Americans and their knowledge of Statistical Control that led to the foundation of the ultimate quality management philosophy – total quality management (hereafter referred as TQM).

Just as Japan, the Central and Eastern European (CEE) states had their own quality movement after the end of WWII, but with one of the main differences being the involvement of the U.S.S.R. (Union of Soviet Socialist Republics) instead of the U.S. (United States). Nevertheless, so far, except for some accounts of the quality movement in Russia, there have been no attempts by local or foreign academicians to try and account for the quality movement in the CEE region and Bulgaria in particular. With this in mind, this research work represents the first official attempt of an in-depth investigation of the evolution of quality management in Bulgaria. In short, our study seeks to answer the following research question [RQ]: *How has quality management in Bulgaria evolved since the end of WWII until recent days?*

**[Bulgaria in the Field of Quality]** Bulgaria – a former communist state (\*not part of the Soviet Union, but a satellite state), a current North Atlantic Treaty Organization (hereafter referred as NATO) and European Union (hereafter referred as EU) member - is a small country located in Eastern Europe. Before the collapse of communism, Bulgaria was considered a major supplier of various high quality products to the Commonwealth of Independent States (here after referred as CIS) and the Union of Soviet Socialist Republics (hereafter referred as USSR) member states. During the 60's, 70's and 80's of the last century, Bulgaria enjoyed the reputation of an important economy within Eastern Europe and the country was well-known for its agricultural, textile, electronic, and other products.

The end of the communist era, however, was a major blow to the political promises made since the Revolution (Lee et al., 1992). It became clear that rather than being on the top of the pyramid in terms of economic and technological development, the communist states including Bulgaria were far behind the capitalist economies of Western Europe and the Pacific Rim. The so-called 'grim economic realities' of the West as the socialist propaganda liked to refer to, were in fact ranging from superior weaponry to advanced production systems (Lee et al., 1992) that yielded products of such a high caliber that was unknown to most of the consumers in the Eastern Bloc.

For more than two decades now, Bulgaria has been enjoying the political freedom of democracy while trying to tackle its unfortunate legacy brought by the centrally-planned economy.

From a pro-Soviet country with strong anti-Western sentiments, today Bulgaria is a member of NATO (since 2004) and EU (since 2007), and it also vigorously participates in the European and global markets. To many, these factors would automatically lead to the conclusion that Bulgaria has managed to overcome its ill-fated legacy of a manufacturer of low quality products and that the country has already managed to embrace the successful quality management philosophies of the West and the Pacific Rim, such as the U.S. and Japan in particular. According to some researchers, the shift from centrally-planned to market economy should lead to improvement in product quality (Williamson, 1992; Bose and Kemme, 2002), however empirical evidence in developing countries suggests that improvement in these areas is not automatic (Sandholm, 1988).

**[Literature Review]** Little, not to say incremental, research on the quality initiatives in Eastern Europe (\*less Russia) has been conducted so far. It is interesting to note that during the 90's of the last century, the research works on the topic of quality management in Eastern Europe's manufacturing sector was more prevalent than it has been for the last ten years or so. Of course, Russia has been in the limelight since the capitulation of the USSR, but this must not surprise us, for Russia's domestic market size, educated labour force, and abundance of natural resources make the country a key player in the world economy (Spenner and Jones, 1998). Moreover, in recent years, with the advancement of technology including new manufacturing methods such as 3D-printing, the importance of quality as a competitive advantage has been suppressed. These trends and notions have further limited the number of studies in the field of quality management, not only in former communist states, but also in the academic world as a whole.

As to Bulgaria, our investigation reveals no significant studies on quality management, especially ones published in English. Certainly, the very fact that Bulgaria was a satellite state of the Soviet Union and strictly followed the policies rendered by the centrally-planned economy gives us some idea of the quality movement in the country, especially in the period after World War II up until the end of the communist era in 1989. The few studies in the region agree that prior to the end of communism, Bulgaria and the rest of the communist states relied on outdated QM approaches (i.e. inspection) and suffered from low product quality (Chasin and Jaffe, 1979; Gorlin, 1981; Lazer, 1986; Roland 1988; Alexeev 1991; Fakiolas, 1995). Moreover, since the collapse of the Iron Curtain, the few official studies on quality in transition economies (\*former communist states) have defined a quality gap in Central and Eastern Europe (CEE), where the Western CEEs (i.e. Hungary) have been relatively more successful in product quality upgrading than their Eastern counterparts (i.e. Bulgaria) since the end of communism (Landesmann and Burgstaller, 1998; Spenner and Jones, 1998; Walsh and Whelan, 2000; Brouthers and Bamossy, 2006). For example, a comparison of product quality between Germany and the former communist states in Central and Eastern Europe (Benkovskis and Rimgailaite, 2010) reveals that the Baltic countries (Lithuania, Latvia, and Estonia) and Bulgaria appear to have not managed to catch up with the level of product quality in the advanced nations.

Finally, in recent years, research works on the quality evolution in the CEE region and Bulgaria per se have been lacking. In fact, the few studies that have addressed quality management and product quality in the region have looked at Central and Eastern Europe as a whole, rather than

focusing on each of the states – a trend that was started during the end of communism and continues to persist, it seems.

**[Research Methods]** The main purpose of this study is to analyse the quality movement in the manufacturing sector in Bulgaria from the end of World War II until the present day. In short, our study uses the *inductive approach* and entails three different stages – (1) exploratory, (2) descriptive, and (3) descripto-explanatory. Furthermore, we employ three research strategies, namely (1) grounded theory, (2) case study, and (3) survey. In essence, the thesis represents a *longitudinal study* relying on *mixed method research*. The primary data on which this study is based is derived through fifteen in-depth, semi-structured interviews with experts in the QM field, a single case study of one of the largest Japanese manufacturers with a branch in Bulgaria, and a survey involving 127 companies registered on the territory of Bulgaria.

**[Findings]** Based on the analysis of our findings, we claim that Bulgarian quality management approaches systems before the end of communism were relatively advanced in comparison to other communist states at the time and guaranteed above average product quality, especially in the case of export goods. In fact, our discussions reveal that through a number of intense collaborations with the capitalist economies of the Federal Republic of Germany and Japan (\*especially Japan), in the early 80's Bulgaria was introduced to advanced QM methods (i.e. Quality Control Circles), which had a positive effect on the evolution of QM in the country. In line with this, Bulgaria was able to manufacture quality goods at a price that was almost impossible to achieve by the capitalist states, hence Bulgarian products were very successful in some parts of the world (i.e. the Arab states). True that product quality provided by the Western economies and Japan at the time was higher, yet it came at a price that was out of reach for many countries. Therefore, the opinions of Western researchers about Bulgarian QM approaches being severely outdated and product quality being low were exaggerated to a large degree. Our assertions are also supported by the fact that Bulgaria revealed astonishing capabilities in a number of industries including electronics and IT, and very probably, without the severe political and economic dependence on the USSR, Bulgaria's quality movement would have been very successful for its most part.

Our findings and the followed analysis of the data relevant to the transition period in Bulgaria (1990-2002) refute the positive correlation between the introduction of market economy and quality upgrading proposed by researchers including Williamson (1992), Bose and Kemme (2002). In fact, our empirical findings support Sandholm's claims (Sandholm, 1999) that the shift from centrally-planned to market economy does not necessarily lead to improvements in product quality. At the same time, if we have to be more precise, some positive developments were observed in the first few years of the transition, when the Bulgaria-Japan collaboration in the field of QM was very intense and fruitful to a large degree. Thus, up until 1995/1996, through support from Japanese government institutions and businesses (i.e. JICA, JETRO, Sumitomo) Bulgaria and the Bulgarian Quality and Productivity Centre (BQPC) per se were able to diffuse modern Japanese quality management approaches, systems, tools and techniques (i.e. TQM, 5S, SMED, SPC) in some of the leading enterprises forged during the socialist era. Nevertheless, the results yielded by these developments were quickly eradicated due to the extremely unsuccessful mass privatisation

programme and the followed deindustrialisation in the country. Therefore, overall our findings claim that during the transition, quality management and product quality as a source of economic growth were not only unsupported, but largely neglected and even suppressed. We also confirm the widening of the product quality gap between the Western and Eastern CEE states as proposed by Landesmann and Burgstaller (1998), Spenner and Jones (1998), Walsh and Whelan (2000), Bose and Kemme (2002), and Brouthers and Bamossy (2006).

Finally, the political and economic changes that Bulgaria experienced in the last two decades (post-transition era) might have led to the ill-fated conclusion that Bulgaria and its people have managed to overcome the unfortunate legacy of the centrally-planned economy and the followed transition. Higher motivation, efficiency, and productivity are just few of the traits that the Western and Pacific Rim companies were hypothesised to have injected in local managers and workers through the introduction of modern QM practices at their company branches in Bulgaria. Yet, our empirical data contradicts this point of view. Certainly, the EU integration of Bulgaria has brought a number of positive changes including political and economic stability followed by increased FDI, as well as modern technology and know-how transfers among others. Nevertheless, amid the positive developments, the country continues to fight a great number of challenges that were born during the transition period and continue to poison the quality movement in the country. For example, the weak formal institutions in the field of quality management – both government and non-government ones, the labour market challenges rendered by the aging population, and the brain drain among others remain a major obstacle to quality upgrading in the country. Moreover, today Bulgaria is the only EU state without a national quality association and national quality award

**[Conclusions]** Even though some positive developments such as the NATO and EU integration, the GDP per capita increase, the diffusion of modern QM systems (i.e. ISO 9001), etc. hint on positive developments in the field of QM, a number of serious challenges, which were inaugurated during the transition to a market economy, continue to persist. These challenges including the lack of government support, weak formal institutions, pervasive corruption, haphazard reforms in education, limited investments in innovation, technology, HR development, etc. remain a serious barrier to the quality movement in Bulgaria. Therefore, this study argues that the slow and painful transition from a centrally-planned to market economy has impeded the quality movement in the country, and that the evolution and implementation of modern quality management practices in Bulgaria since the end of communism has been unsuccessful for its most part.