

Bata Management System: A Built-In Resilience against Crisis at the Micro Level

Milan Zelený*

Received 25 October 2009; Accepted 5 January 2010

Abstract The Bata Company became the largest and thriving global enterprise of the 20s and 30s, during the decades of economic crises. Why could Bata prosper when everybody around was contracting, laying people off and passively waiting for governmental bailouts and hand-outs? Our answer lies in the existence of a unique, inimitable, integrated management system—a rare thing among modern companies operating with patchworks of disconnected, dysfunctional and non-synergistic, albeit fashionable methods and techniques. Roosevelt’s New Deal was the beginning of the end of management-employee cooperation, strengthening adversarial relations, trade unionism and the final emergence of so-called macroeconomics, reversing the promising microeconomic trends of the time. Resilient, flexible and human-oriented companies are the best protection against government-induced crises.

Keywords Bata management system, microeconomics, creative destruction, autopoiesis, New Deal, macroeconomics, sustainability, resilience, added value, Austrian school

JEL classification C02, C61, D21, D61, D83, L21

1. Introduction

“If you can keep your head when all about you
Are losing theirs and blaming it on you,
If you can trust yourself when all men doubt you
But make allowance for their doubting too...”

R. Kipling

There were once two brothers in the poorest and most desolate part of Moravia, Tomas and Jan. In all of their lives they knew nothing but crisis, hatred, envy and disaster. Yet, they managed to build the largest and most successful global corporation, some 80 years before its time. Tomas died in a plane crash in 1932, Jan went to exile in 1939, running away from the Nazis who took over the Bata company in Zlin. The Allies bombed its plants in 1944. President Benes nationalized them in 1945, staging a retribution kangaroo court where Jan was found guilty of high treason *in absentia*. The communists took over the company in 1948 and reduced it to its caricature within a decade. Jan died in Brazil in 1965, never seeing his home again.

* Fordham University, Graduate School of Business, 33 West 60th Street, New York, NY 10023, USA. The Tomas Bata University in Zlin, Faculty of Management and Economics, Mostní 5139, 76001 Zlin, Czech Republic. Phone: +212 636 6175, E-mail: mzeleny@fordham.edu.

2. New Deal Lessons

The most famous Bata slogan and strategic conviction was “Every worker should become a capitalist.” This irritated not only trade unions, but also industrial associations endeavoring, along with the State, to see that the hardships of the Great Depression was shared “equitably” between as many firms as possible. This “redistribution of pain” became the clarion call of international socialists. In such a climate, Bata’s remarkable achievements—high wages, low prices, content customers and dynamic growth—had to be punished, not rewarded or even left alone.

Such views were widely held during the Great Depression also in the U.S., especially under the presidency of Franklin D. Roosevelt (FDR). Before that, President Hoover launched public works projects, raised taxes, extended emergency loans to failing firms, hobbled international trade, and lent money to the states for relief programs. FDR accused Hoover of having presided over “the greatest spending administration in peacetime in all of history” (Woods 2009). Then he became the President.

According to a typical story of the day, the so-called *Sweater Fable* (Will 2009), FDR got the idea of the redistributive new deal at a meeting with journalists on April 12, 1933, barely a month into his new office. The success of “a certain little sweater factory in a little town” became an inspirational symbol for the almost two decades of crisis ahead.

The new president described a small sweater factory’s efforts to fight the crisis. The factory employed some 200 people and was well-known for good relations between its owners and workers. It was the town’s only industry. When sweater sales dropped sharply, the town was virtually starving.

Then the employees agreed that they could keep their factory going if wages were cut by 33 percent. Sweater prices could then be reduced, thus creating an edge over their competition. FDR narrated about how the factory’s salesmen went to New York and sold so many sweaters in 24 hours that the factory had enough work for three shifts a day for the next six months. Journalists were impressed and naturally excited by the tale of a small American community triumphing over the Great Depression.

FDR looked at them through his *pince-nez*: “They get a good deal of cash into the community. . . . [But] they undoubtedly, by taking these orders, put two other sweater factories completely out of business,” he counter climaxed. Then he started to belabor his government’s plan for the bulk of consumption in any given industry to be *spread equitably* through the sector as a whole. “Instead of trying to concentrate production to meet that consumption into the hands of a small portion of the industry, we want to spread it out. . . . It might be called the regulation of production or, to put it better, the prevention of foolish overproduction,” FDR said.

That is how the New Deal was born, prolonging the economic crisis well into the beginning of the 1950s. The New Deal interfered with the free movement of prices and wages, overruling the market’s attempts to reallocate resources in an optimal fashion. Both Hoover and Roosevelt were “leading the country down the path to socialism.”¹

This is precisely what Bata was facing in his own country and around the world.

¹ “FDR’s Disputed Legacy”, *Time*, February 1, 1982, p. 23.

His worldwide success in overcoming the crises was (and is) being belittled by virtually everybody, from governments through unions to competing businesses large and small. Bata's only "fault" was that he did not make his company dependent on governmental handouts, kept it private and out of stock market speculations, building-in a remarkable corporate *resilience* through his coherent and integrated Bata Management System.

There is a current view, repeated by some politically-minded economists, that only World War II finally ended the Great Depression. It comes from Paul Krugman: "What saved the economy, and the New Deal, was the enormous public works project known as World War II, which finally provided a fiscal stimulus adequate to the economy's needs."² If we disregard Krugman's calling the most destructive war in history a "public works project," we cannot overlook that 29% of the workforce is fighting the war (so unemployment is down) as well as that the 13% real GDP growth was based on inflated governmental prices, not on free-market forces. Consumer spending, no matter how high, cannot disregard what the money is spent on. War spending can hardly bring prosperity.³

3. Micro versus Macro Economics

Everything in economics happens at the level of human decisions, interactions and exchanges, i.e. at the micro level. Nothing happens *per se* at the derived and aggregated macro level—unless it is induced artificially by a specific government intervention in the functioning of free markets. Governmental "tsars" are given the power to intervene in economics on behalf of politicians.

All sciences proceed from micro to macro—from understanding micro interactions to describing macro emergent phenomena. The only exception is economics, favoring governmental interference with the macro, and thus with the micro too.

It is appropriate to quote F. A. Hayek on the subject: "It seems to me more and more that the immense efforts which during the great popularity of macroeconomics over the last thirty or forty years have been devoted to it, were largely misspent, and that if we want to be useful in the future we shall have to be content to improve and spread the admittedly limited insights which micro-economics conveys. I believe it is only microeconomics which enables us to understand the crucial functions of the market process: that it enables us to make effective use of information about thousands of facts of which nobody can have full knowledge." Hayek (1978)

Also Mises fully understood the autopoietic (self-producing) nature of spontaneous economic orders. In his last monograph, *The Ultimate Foundation of Economic Science*, Chapter 5, "On Some Popular Errors Concerning the Scope and Method of Economics," he addresses the issues of methodology: "For the theory of integral socialism it may seem sufficient to consider the valuations and actions of the *supreme tsar* only. But if one deals with a system in which more than one man's striving after definite

² "Franklin Delano Obama?" *New York Times*, November 10, 2008.

³ "If war could bring back prosperity, then enormous armadas of well equipped and most expensive naval fleets should have a regular *rendezvous* encounter in the Pacific, evacuating all personnel from the ships and then sinking them mercilessly to the sounds of respective national anthems. Overpriced worldwide fireworks celebrations of the newly found prosperity could then commence . . ." (Woods 2009, p. 105).

ends directs or affects actions, one cannot avoid tracing back the effects produced by action to the point beyond which no analysis of actions can proceed, i.e., to the value judgments of the individuals and the ends they are aiming at . . .” Mises (1962)

It is quite telling that the number of government tsars (or czars—U.S. nickname for special executive branch officials with expanded powers—has increased under Obama quite considerably: 32 czar positions created so far. (There were 12 such positions under Roosevelt and only 1 under Reagan or Eisenhower.) The distinction between macroeconomics and microeconomics reflects modern physics’ distinction between microscopic physics, which deals with systems on an atomic particles scale, and molar physics, which deals with systems on a scale appreciable by man’s gross senses. The evolution that led *from macroscopic to microscopic* physics progressed from a less satisfactory to a more satisfactory method of dealing with the phenomena of reality, as it has been with all other sciences.

In economics the progress has been precisely the opposite. It asserts that microeconomics is an unsatisfactory way of studying the problems involved and that the substitution of macroeconomics for microeconomics (ever since Keynes) amounts to the elimination of an unsatisfactory method by the adoption of a more satisfactory method. Because the market operates on significantly more extensive information than any participant can ever possess, a particular economic outcome must depend on vastly more facts and variables than any scientific observer can ever insert into his models or hypotheses explaining or predicting the outcomes. Microeconomics therefore accepts that economists can never achieve a full explanation or an exact prediction of the particular outcome of a given situation. Microeconomics must be content with only a *pattern prediction*. We can only say what kinds of things will not happen and what kinds of patterns the process will generate, without being able to predict a particular outcome.

Macroeconomics, contrary to all other sciences of complexity, has replaced indispensable economic information by statistical figures on aggregates and averages. These are undoubtedly easier to forecast but also significantly less relevant to scientific explanation or prediction.⁴ We cannot validate macroeconomic formulas by simply filling them with empirical measurements and then using the “results” to explain human action. Such measurements, if not performed by the very people whose actions we want to explain, remain wholly uninteresting. All that is relevant in economics is not how things are or appear to an observer, but how they appear to human beings, to acting men.

Recall the famous physicist Lord Kelvin insisting: “When you cannot measure, your knowledge is meager and unsatisfactory.” This may be true for physics—and its dealing with fundamentally much simpler phenomena—when compared to economics. Important is not whether one can measure, but if one knows what such measurements mean and how to interpret them. Striving for pseudo-exactness by imitating methods

⁴ Imagine a room filled with basketball players on the left and a team of midgets on the right. One can easily calculate the average height (or any other attribute) of persons in the room, but there will not be a single person of that average height in the room. The same holds for aggregates. Predicting the height (or any other attribute) of any particular person on the basis of the average (or aggregate) is doomed to failure by definition. Except that the “room” of the economy and its attributes is infinitely more complex.

of the physical sciences ignores the fact that economies are not machines, but autopoietic (self-producing) social organisms. A consistent macroeconomic approach would therefore have to shun any reference to action valuation, like prices and money. To quote Mises (1962) again: “The market economy is a social system in which individuals are acting. The valuations of individuals as manifested in the market prices determine the course of all production activities. If one wants to oppose to the reality of the market economy image of a holistic system, one must abstain from any use of prices.”

It is therefore quite natural to see that the best defense against economic crisis is *resilience* at the level of actions, decisions, interactions and valuations, not at the central administration level of the “intervention tsar”. Businesses must protect themselves through creating their own, natural, flexible and internally built *company management systems*—unless the crisis was a result of governmental intervention rather than free market forces. Then the affected businesses have only two choices: (i) actively insulate and protect themselves from governmental intervention, or (ii) passively wait for governmental protection and its administrative steersmanship of the economy. Tomas and Jan Bata have clearly chose the first option and created the remarkable *Bata Management System* (BMS) while keeping the company private and thus insulated from public and governmental takeovers. They achieved the necessary level of self-confidence, team-spirit and employee loyalty to thrive and grow under two decades of devastating crises.

It is inspiring to quote Jan A. Bata on the aftermath of the Great Depression: “Have you seen any crisis at Bata’s? The whole world was in crisis but we grew. Why? Does a banker dictate our action? No. He waits at our doors, the hat in his hands, moaning: ‘At your service, always willing, yours Julius B. Skilling’—isn’t it so? Would we ever allow him to order us around? Hell no. He would run away on the very first day. But banks are more like vampires than hotbeds of entrepreneurship. The people who do not see inside, like the journalists and such, then call it the ‘dusk of capitalism’.” Bata (2008). At least in Europe it is mostly so.

Why was there no crisis at Bata’s? Why could they keep their head when all about them were losing theirs—and blaming it on them?

4. The Bata Management System (BMS)

Bata’s enterprise was organized and behaving as a living organism—learning, adapting and self-organizing. It was also viewed as such by Bata and his *associates*—a label for Bata employees, copied by today’s Wal-Mart. Bata employees felt to be parts and components of a living organism, not of some well-oiled, well-crafted machinery. Bata Co. practiced the system of *Ten Principles* (Table 1), i.e. key dimensions and their practical realizations, which formed the Bata Management System (BMS):

The company was a privately held corporation, not a publicly owned one: there was no public stock and no public trading with company ownership. The company created a harmonious human, ecological and architectural co-existence with its immediate environs of Zlin and the Moravian region as a whole. Employees were partners

Table 1. “The Ten” Leading Principles of Bata

	Dimension	Realization
1	World class	Global benchmarking
2	Cooperation	Partnerships and alliances
3	Self-government	Private corporation
4	Participation	Profit sharing
5	Co-ownership	Employee capitalization
6	Self-management	Shop autonomy, internal markets
7	Co-entrepreneurship	Customer, internal and external
8	Competition	Internal benchmarking
9	Service to the public	Purpose of business
10	Synergy	Balanced system of all dimensions

and associates (co-workers), capable of effective cooperation, sharing and *considerable sacrifice*.

4.1 The Purpose of Business

A crucial dimension for BMS was its explicit purpose of business: “Service to the public.” This fundamental commitment can be appreciated especially in the current post-crisis environment. It helped to build lasting trust of customers and employees, brought in real earned profits and added value to all participants in the Bata enterprise.

The aims of business are historically significant and at least three modes have been tried by entrepreneurs and corporate managers: (i) Shareholder dominance, (ii) Customer dominance, and (iii) Employee dominance. Bata tried and succeeded with the fourth way.

The shareholder dominance has ruled publicly owned enterprises in most countries:

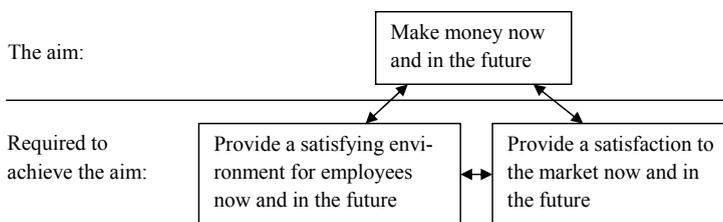


Figure 1. Shareholders are paid first

In Figure 1 the most important objective for the company is to make money for shareholders. This is the main reason for the company to exist. “Increase shareholder value” is the watchword.

The second mode puts the customer first, as recommended by the quality movement and its “Put quality first” slogan.

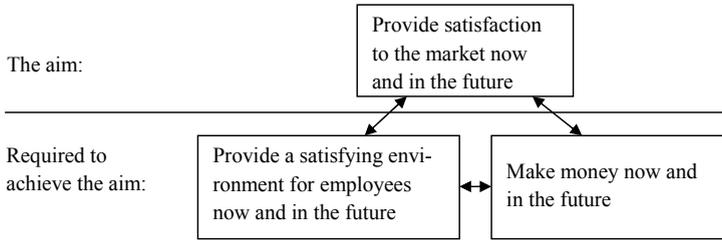


Figure 2. The customer comes first

In Figure 2 this rearrangement of aims and means is achieved by the customer’s dominance, reflected in Bata’s famous slogan “Our customer, our master.”

The third possible mode is to make the welfare of the employees the first consideration, as shown in Figure 3. There are not too many companies following this third

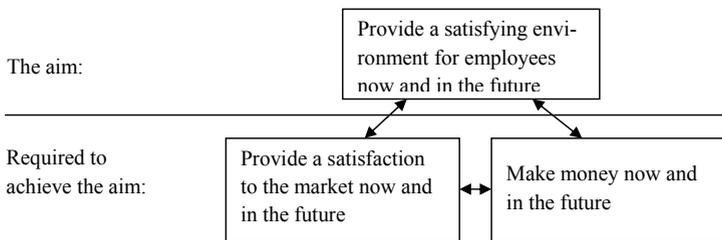


Figure 3. Look after employees first

choice. Pacific Southwest Airways advertises itself as looking after the employees, assuming that the employees will look after customers.

Bata followed a different aim, as suggested in the following diagram:

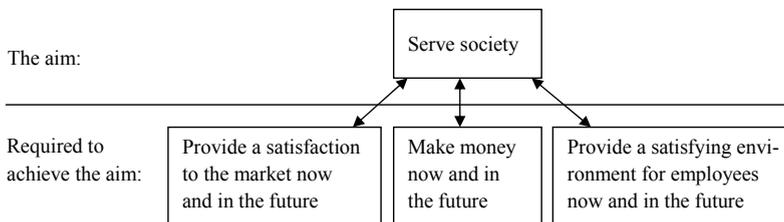


Figure 4. Bata’s aim

From both word and deed we learn that Bata thought of his business enterprise as an instrument for social good. From very early on in the 1900s he saw his enterprise as the means to lift the standard of living of people in Zlin and elsewhere in the world. The *Fourth mode* allowed him to use three powerful means—money, quality and employee loyalty—to achieve his tradeoffs-free goal (Zeleny, 2009).

While the previous approaches weakened some means by promoting them to purposes, Bata created the first truly powerful, resilient and vastly successful business based on the *synergy* of all three complementary and indispensable means. This is why he was able to prosper through all the crises of the 1920s, 1930s and 1940s. The remains of those glorious days carry the remains of the *Bata Shoe Organization* through even today.

4.2 Evolution of Bata Management System

The Bata Enterprises was founded by Tomas Bata (1876–1932), the son of a shoemaker in a small town in Moravia. Strongly influenced by American industrial practices and the early thinking and experiences of Henry Ford, Bata combined them with the cultural distinctiveness of his native Moravia and created what is today known as the Bata Management System. This participative, human-oriented system was decades ahead of its time, including concepts such as empowerment, worker participation and quality improvement.

Fortunately, the BMS survived Tomas's premature death in 1932 and the company found its largest success and expansion under the leadership of his step-brother Jan Bata. The BMS had its roots in Henry Ford's ideas – only those before 1926—as summarized in his book *Today and Tomorrow* (Ford 1926). Ford's early view of management was based on worker autonomy, knowledge, just-in-time, waste minimization, quality and customer involvement (customization). It was all but abandoned by Ford in his turnaround embrace of mass production, Taylorism and hierarchical management in the 1930s. But in Moravia, Tomas Bata remained true to Ford's original ideas and brought them to practical fruition in the late 1920s and early 1930s.

The BMS is a system of extraordinary productivity and effectiveness. Its main characteristics include: integration instead of division of labor, whole-system orientation, continuous innovation and quality improvement, team and workshop self-management, profit-sharing and autonomy, workers' participation and co-determination, clearly-defined responsibilities, organizational flexibility, vigorous automation and most importantly an uncompromisingly human-oriented capitalistic enterprise. Every employee was a partner, co-worker or associate and all workers were to become owners and capitalists.

There are clearly identifiable principles which Tomas Bata evolved, adhered to and ultimately made to work. He proclaimed his first slogan "Thinking to the people, labor to the machines" at the factory gate. He eliminated the intermediaries: a large network of Bata-run stores and outlets complemented and extended his production operations by integrating customers into the production process.

Bata's "Our customer, our master" and "Service to the public" were not just slogans, but sound principles of business. Production and profits were not the ends, but

the means towards improving the individual lives of all Bata employees. Employment was stable and long term: a part of each worker's earnings was reinvested in the company (the initial endowment put up by the company)—each worker became a capitalist and partial co-owner. Bata personnel policy and management of human resources, especially employee selection, was multifaceted and pivotal for long-term success.⁵

Bata claimed that the quality of employee life was a primary concern of the employer (not of the state). He offered economic incentives to employees to stop drinking and smoking, or to lose weight. He provided family housing (with gardens) and an essential social infrastructure: hospitals, museums, churches, swimming pools, recreational facilities, sport stadiums, and roads—all part of the self-imposed responsibilities of Bata Enterprises.

He also established and ran his own school of management: an institution considered too important to be left to the external and traditional providers of business education. He was seeking enhanced self-reliance, independence and vertical integration: railroads, waterways, airports, land, forests, even local government—all became connected to his enterprise. He strove to operate with no debt: all state taxes were paid according to obsessive principles of integrity.

Thanks to these and similar concepts, Bata's business grew and flourished even during the worldwide depression of 1929–1932. He was fully aware of the qualities of his system: he knew it was a whole which could not be copied in parts—there were no “company secrets”. Often he assured his associates that no fair competition could ever pose a threat to their performance.

However, the Bata system was gravely damaged by the “unfair competition” of politics and Nazi ideology in 1939, and then it was vilified and later proscribed by Marxists and communists of the post-1945 era. Bata's own family, managers and workers were forced into exile.

4.2.1 Operational practices

Bata's strong symbiosis of workers' autonomy and empowerment through technology was unique and very effective even by today's standards. Because of the lack of space, we present here only a short summary of Bata practices:

- (i) The process of continuous innovation and improvement; the total system of preventive maintenance: machine shop working as “clockwork”;
- (ii) In-house adaptation and rebuilding of all purchased machinery; 10 percent of the engineering employees involved directly in the R&D function;
- (iii) The assurance of continuously high-quality output with processes streamlined to eliminate breakdowns and stoppages and individual workers given quality responsibility;

⁵ Detailed treatment of human resources can be found in Tomašík, M., *The Personnel Department of the Bata Shoe Company till 1939* (Personální management firmy Bat'a, a.s. Zlín do roku 1939), The Tomas Bata University Dissertation, Zlín, October 2008.

- (iv) Total manufacturing flexibility was achieved by:
 - breaking the traditional large factory plant into smaller, semi-autonomous and specialized workshops; and
 - making all machines self-contained, independently powered and motorized by electric motors (referred to as “electric robots” by Bata)
- (v) Changes in product styles and types were achieved quickly (in a few hours) by rearranging machine sequences and layouts, by pulling out machines temporarily (“decoupling the line”) and by designing most adjustments and customization into the early stages of the production process;
- (vi) A close personal “ownership” relationship between workers and “their” machines: not only was there no distrust of the machinery but there was also no neglect – only pride of ownership, emotional involvement and total care;
- (vii) All operators were able to stop production line conveyors at will; all waste in production was minimized (everything had to be ready just in time for the next step); all machines were designed to serve “the process,” not just individual operations;
- (viii) Dedication to automation: one of Bata machines “did everything but talk and sing” (the note-scribbling overseas visitors were never able to copy it; a machine called the “Union press” produced a full pair of shoes in a single movement);
- (ix) A perfect, semi-automated, rotational system of preventive maintenance of all machinery (including overhauls and updates), carried out without ever stopping production.

5. The financial crisis and BMS

Following the death of the company’s founder Tomas Bata in 1932, his half brother Jan Antonin took over the firm. The Great Depression was a testing time for Bata, as it was for practically all companies. The Bata story shows that corporate success is possible even in the midst of an economic crisis and without government intervention or support.

A clearly defined purpose and common interest supports a genuine cooperation between owners, managers and employees, providing the resilience for the firm during times of crisis. Basically there are two possibilities:

- (i) “Passive macroeconomic reaction.” This includes lobbying, bribes, and the fashionable and common “waiting for Godot”—i.e. waiting for various measures, regulatory rules and financial help to come from the State (taxpayers and potential customers).
- (ii) “Active microeconomic reaction,” whereby the organization and management of a firm are adapted to tackle the prevalent conditions of the crisis; looking for new

business models, developing new products and services, taking advantage of the passivity and “waiting tactics” of other companies, creating a new competitive advantage.

It is the second approach which was so abhorred by FDR (see his “Sweater story”), but so passionately practiced by both Batas and their thousands of associates the world over. It is for each company to decide whether to go the way of “the party and the government,” or the way of private enterprise operating in a free market to serve the public by fostering economic performance and social prosperity. Do they prefer a state-controlled macro-economy or a free-enterprise micro-economy to provide the ideas and lead the way out of the crisis? *Non tertium datur.*

5.1 Crisis Statistics at Bata Enterprises

Basic principles of the Bata Management System were outlined in Zelený (2005). The areas covered include autonomy and the business activities of workshops; the employees’ share in profits of the workshop and company; capitalization of employees (associates) and the company bank; the Bata system of education; and the unity of the system, binding together customers, innovation, processes and finances.

Before the Great Depression of 1930 there was the severe crisis of 1920–1923. In 1922 it reached Czechoslovakia and affected Bata Enterprises. The recovery was swift in the U.S. because the market was allowed to recover and reinstate its balance without the Fed employing any of its macroeconomic tools. In Czechoslovakia there was considerable meddling by the government, when lawyer and Minister of Finance Alois Rasin engineered an unprecedented rise in the value of the Czechoslovak crown by raising the interest rate to 7 percent through speculative interventions on the Zurich stock exchange. His aim was to create deflation, but as a result of the high value of the crown, he effectively ruined the competitiveness of Czechoslovak exports. The result was a huge drop in industrial output and very high unemployment.

This was what Bata had to deal with. He managed to maintain full production, though partly due to lowering both expenses and the prices of the company’s shoes. The company’s strategy dealt brilliantly with the government’s incompetent policy. At the time, Tomas Bata issued a public proclamation announcing that wages of his employees were being dramatically reduced in order to maintain full production and to provide the public with affordable shoes. In fact he went as far as reducing the retail price of his shoes by 50 percent. At the same time, Bata pledged to provide his workers with groceries and living essentials at greatly reduced prices.

The measures were a success and demonstrated that a good businessman can successfully resist such adverse conditions as short-sighted governmental policy. In a conversation with Mr. Sonnenschein, the CEO of Vitkovice metal works, Bata was asked how he expected his workers to survive a 40 percent wage cut. After informing him that he would supply them with essentials at highly subsidized prices, the steel baron facetiously asked Bata if he was also a grocer. Bata replied proudly: “Yes, I am also a grocer.” The spirit of FDR’s “little sweater company” was alive and kicking in the Batas.

During the Great Depression, as the Tables 2–8 indicate, the company prospered under both Tomas and Jan, there was virtually no crisis for them in an otherwise harshly depressed industry worldwide. The Batas have done the work of crisis without the crisis.

Table 2. Bata employees

	1924	1929	1931	1934	1937
Employees' weekly share of profit (Kcs)	50	90	98		
Employees' deposits at company's bank (mil. Kcs)	12	61	101	135	196
No. of Bata employees in Czechoslovakia	3,011	12,200	19,722	22,050	
Average weekly pay	205	469	514	525	

After the weekly employee profit share was established, Bata's production reached its highpoint. This measure helped to guarantee direct responsibility for quality and performance with the majority of employees.

The company bank was established in 1919 to ensure the company's capital independence. Investment capital was covered by corporate profits and the employees' savings at 10 percent interest (compared with 5 percent at most banks). The company bank functioned as a partner: it generated its profits from sharing in the success of bank-financed projects, not from interests and fees.

Bata supported capitalization of his employees, aiming for financially secure retirement after the age of 50. The influx of young employees kept up performance and vitality; during the crisis Bata could choose new talent.

Wages were calculated for a workshop as a whole, not just for each employee. The allocation was made within the team according to individual performance and added value. There were five categories of pay: (i) fixed wage, (ii) individual piece wage, (iii) team piece wage, (iv) salary with share in profit (managers had to also share in losses), and (v) special rewards and premiums.

Table 3. Average weekly salary in 1932 (Kcs)

	Bata	CSR	France
Qualified	400	270	373
Unskilled	280	150	140
Apprentices	180	100	108

The pay at Bata clearly exceeded the shoe industry averages in the country and Europe at the height of the crisis.

With the system of planned production, each employee created a daily plan. External suppliers were paid exclusively in cash; internal suppliers were paid according to internal prices of the internal market economy.

Table 4. Bata's production

	1924	1928	1929	1931	1934
Daily output/pairs of shoes (thousands)	14	75		180–200	
Productivity (pairs/employee/day)	4.64	6		8–9	
Percentage share of shoes production in CSR			33.2	77.8	84.6

The daily productivity per employee grew continuously. The dynamics of Bata's growth in relation to the decline of traditional local competitors is reflected in its share of Czechoslovak shoe production. Also the quality of Bata shoes played a major role in the demand.

Table 5. New stores openings in Czechoslovakia

Year	Stores
1924	36
1929	459
1930	752
1937	2,076

Bata eliminated the middleman by opening his own retail stores, selling only Bata shoes. Owning the retail stores allowed direct contact with customers, maximum quality and flexible introduction of new designs. The store manager was the capital owner, under a franchise arrangement. The basic ethical rule was that taking any bribe led to instant dismissal.

Table 6. Prices and sales

	1924	1928	1929	1931	1934
Average sale price/pair of shoes (Kcs)	79	53		46	34
Sales of pairs of shoes (thousands)					
Foreign			7,166	13,567	10,925
Domestic			8,680	21,557	26,768

Thanks to growing demand, sales prices of Bata shoes could be falling constantly during the time of crisis, always below the prices of competitors. Bata's world class marketing department achieved unrivalled levels of services in Bata stores. Radical growth in domestic sales refutes the myth about Bata being concentrated on exports during the crisis and neglecting home consumers.

Table 7. Share of total Czechoslovak exports (%)

Year	Stores
1928	50.7
1931	71.7
1934	86.1
1935	88.6

Bata's exports grew at the expense of domestic competition, unable to compete in terms of quality or quantity because of the lack of a good management system. Bata made Czechoslovakia one of the best “shoed” countries in the world.

Table 8. Average shoe consumption (pairs/capita/year) in 1936

Czechoslovakia	3.75	Germany	1.25	Russia	1.00
United States	3.50	Switzerland	1.75	Poland	0.75
England	3.00	Austria	1.25	Hungary	0.75

6. Conclusion

There are three kinds of values, all of which are wanted by everybody and needed by anybody for any work in the world. They are: *capital*, *knowledge* and *freedom*. In spite of this, people are slaves of debts, passions and undisciplined lives; young people without their own earned money, knowledge and freedom are flying around the flashing lights of empty promises of hope until they end up totally exhausted and with their wings severely burned. There is no help for these people, be it school, money or freedom. The purpose of preparation of the next entrepreneurs-to-be is to become masters of capital, knowledge and freedom—not their servants.

Each country and region maintains and expands a wide range of cultural wealth: not only the visible things such as buildings, cathedrals and works of art, but also literature, music, paintings, theatre and film. These usually dominate thanks to their visibility and longevity.

The Batas have left plenty of “visible” things: the bold architecture of Zlín, a wholesome city design, hospitals, stadiums, hotels, theatres—most being fully functional, not just admired, even today. They left us with excellent traditions in commercial arts, organic chemistry, engineering design and a wealth of publications, images and artifacts.⁶

But there exists an even more precious and valuable, albeit less visible wealth—the one embedded in the knowledge, abilities, methods and experiences of people, forming

⁶ An excellent example of the (“still”) visible wealth of Bata culture is best captured in the work of Dr. Dagmar Prasilova in her monumental dissertation *Zlín et l'urbanisme de Bata* (1894–1949), Ecole Nationale Supérieure D'Architecture de Paris-Belleville, December 2007.

the root source of all those visible “things” of culture. The true culture of a nation is not frozen in cathedrals and bridges, spires and skyscrapers, but in the ways people live and work. How they organize their workplace, how enriching they find their work experience, how well they serve themselves, the public, and the world. That is the true measure of human culture.

Reading through a body of knowledge should be an input into the life of reflection, a road to wisdom. But one can get lost in data and overloaded with information; yet, there is never too much knowledge—and wisdom is the rarest of possessions. Knowledge of life and work, not just of leisure and entertainment, is the unique foundation of the culture of any nation. Management knowledge and wisdom is the real groundwork for all that. The Bata Management System can be considered such a foundation.

Because an authentic quote is often more convincing than a theoretical explanation, we end with Tomas Bata’s credo, in his words: “Our life is the only thing in this world that we cannot consider to be our private property, as we have not contributed anything to its generation. It was only conferred to us with the obligation and expectation to pass it on to our posterity, multiplied and improved. Creation and enhancement of our own life is our duty and privilege: we are presenting the accounts of our conferred gifts of life to our contemporaries as well as to the next generations. Our accounting should not end in a deficit, a loss, or impoverishment of our contemporaries and successors. We start with the ‘debit’ and we end with the ‘credit’ and only we are responsible for the final balance. Life is a capital and therefore it must, in the same way as a fertile seed, create something more, something to be left for the ‘spring sowing’ . . .”

Because of such a thoroughly western credo (albeit of the time long past), Tomas Bata left behind a body of practical work, a tangible small model of a working and managing society—as he created in Zlin. He was the *Entrepreneur*.

Acknowledgment The author is thankful to both referees for grasping and recommending both explicit and implicit messages of this paper, as well as accepting its atypical “borderline” structure.

References⁷

- Bata, J. A. (2008). *Těžké časy* (The Hard Times). Krásná Lípa, Marek Belza.
- Bata, T. (1992). *Knowledge in Action: The Bata System of Management*. 1st English edition, Amsterdam, IOS Press.
- Ford, H. (1926). *Today and Tomorrow*. Reprint 1988, Cambridge MA, Productivity Press.
- Hayek, F. A. (1937). Economics and Knowledge. *Economica*, 4, 33–45.
- Hayek, F. A. (1945). The Use of Knowledge in Society. *American Economic Review*, 35, 519–530.

⁷ This article contains a supplement with selected bibliography works on Bata. The supplement can be downloaded at the journal homepage.

- Hayek, F. A. (1952). *The Counter-Revolution of Science*. Glencoe IL, The Free Press.
- Hayek, F. A. (1978). Coping with Ignorance. *Imprimis*, 7, 1–6.
- Hayek, F. A. (1988). *The Fatal Conceit*. Chicago, University of Chicago Press.
- Keynes, J. M. (1936). *The General Theory of Employment, Interest, and Money*. London, MacMillan.
- Krugman, P. (1996). *The Self-Organizing Economy*. Malden MA, Blackwell Publishers.
- Menger, C. (1963). *Problems of Economics and Sociology*. Urbana, University of Illinois Press.
- Mises, L. (1935). Economic Calculation in the Socialist Commonwealth. In Hayek, F. A. (ed.), *Collectivist Economic Planning*. London, Routledge.
- Mises, L. (1962). *The Ultimate Foundation of Economic Science: An Essay on Method*. Princeton, Van Nostrand.
- Mises, L. (1998). *Human Action*. Auburn, L. von Mises Institute.
- Ramo, J. C. (2009). *The Age of the Unthinkable*. New York, Little, Brown and Co.
- Schiff, P. D. (2007). *Crash Proof: How to Profit from the Coming Economic Collapse*. New York, Wiley.
- Schumpeter, J. A. (1942). *Capitalism, Socialism and Democracy*. New York, Harper & Row.
- Senge, P. M. (1996). Foreword. In De Geus, A. (1997). *The Living Company*. Boston, Longview Publishing.
- Sowell, T. (2009). *Applied Economics*. New York, Basic Books.
- Young, J. (1997). *The Natural Economy*. London, Shephard-Walwyn.
- Will, G. F. (2009). FDR's Sweater Fable. *Newsweek*, March 9.
- Woods, Jr. T. E. (2009). *Meltdown*. Washington DC, Regnery Publishing.
- Zeleny, M. (1981). *Autopoiesis: A Theory of Living Organization*. New York, North-Holland.
- Zeleny, M. (1982). *Multiple Criteria Decision Making*. New York, McGraw-Hill.
- Zeleny, M. (1995). Ecosocieties: Societal Aspects of Biological Self-Production. *Soziale Systeme*, 1, 179–202.
- Zeleny, M. (2001). *Information Technology in Business*. London, Thomson.
- Zeleny, M. (2005). *Human Systems Management: Integrating Knowledge, Management and Systems*. Hackensack NJ, World Scientific.
- Zeleny, M. (2005). *Cesty k úspěchu: trvalé hodnoty soustavy Bat'a*. (Roads to Success: On the lasting values of Bata Management System). Brno, Čintámani.
- Zeleny, M. (2009). On the Essential Multidimensionality of an Economic Problem: Towards Tradeoffs-Free Economics. *AUCO Czech Economic Review*, 3, 154–175.