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## PRIVATIZATION THROUGH THE SALE OF EQUITY – CONCEPTUAL FRAMEWORK AND ACHIEVED RESULTS IN SERBIA

Privatizacija putem metoda prodaje – konceptualni okvir i ostvareni rezultati u Srbiji

## Abstract

Following the political changes in 2000, Serbia aggressively accelerated its process of economic transition, which initially started in 1990. As a key element of its transitional strategy, a new privatization model was defined in order to radically change the ownership structure of the Serbian economy. Based on characteristics of the Serbian economy in 2001, the new model stipulated the sale of socially- and state-owned enterprises through tenders, auctions, and auctions on financial markets to strategic and financial investors. As methods of privatization, tenders were used for the privatization of large, while auctions were used for the privatization of medium and small size enterprises. By analyzing the results of implementation of the new privatization model, this paper confirms a hypothesis that the method of sale was the most adequate privatization model in late transition. In addition, it also confirms that tenders were the most suitable method of privatization for large, while auctions were the most suitable method of privatization for medium- and small-size enterprises.

**Key words:** *economic transition, privatization, methods of sale, public tenders, public auctions* 

## Sažetak

Nakon političkih promena 2000. godine, Srbija je agresivno ubrzala proces tranzicije, koji je bio započet još 1990. godine. Kao ključan element tranzicione strategije, definisan je novi model privatizacije sa ciljem radikalne promene svojinske strukture srpske privrede. Uzimajući u obzir karakteristike srpske privrede 2001. godine, novi model je podrazumevao prodaju kapitala društvenih i državnih preduzeća putem tendera, aukcija i aukcija na finansijskom tržištu zainteresovanim strateškim i finansijskim investitorima. Putem tendera su se privatizovala velika, a mala i srednja preduzeća putem aukcija. Kroz analizu ostvarenih rezultata u primeni novog modela privatizacije, ovaj rad potvrđuje hipotezu da je izabrani model prodaje bio najadekvatniji model privatizacije u uslovima zakasnele tranzicije. Takođe, potvrđuje se i hipoteza da je tender bio najbolji metod privatizacije velikih preduzeća, a da je aukcija, kao metod privatizacije, najbolje odgovarala privatizaciji malih i srednjih preduzeća.

Ključne reči: ekonomska tranzicija, privatizacija, metodi prodaje kapitala, javni tenderi, javne aukcije

## Introduction

Privatization represents the "initial trigger of transition" [5, p. 12], and its essence relates to the choice of the prevalent privatization model and the range of privatization. In literature dealing with privatization, this term is defined in various ways. Some authors define privatization only as the disposal of the state-owned property. For example, *Kikeri*, *Nellis* and *Shirley* define it as the transfer of a majority ownership in state-owned enterprises to the private sector, through the sale of equity or assets following liquidation [10, p. 14]. *Ramamurti* defines the privatization process as the sale of all or parts of a government's equity stake in state-owned enterprises to the private sector [12, p. 225]. Finally, World Bank defines privatization as the divestiture by the state of enterprises, land or other assets [15].

Other authors, however, consider privatization in a broader context, seeing it as a phenomenon connecting the activities which reduce the level of the state ownership and its control over the business to the activities which promote participation of the private sector in management of the state-controlled enterprises. Vickers and Wright regard privatization as a common denominator for a larger number of diverse activities directed towards the strengthening of the market and reducing the state's influence [13, p. 1-15]. Hartley and Parker define privatization as "creation of a market economy with the aim of allowing companies to do business on a commercial basis" [9, p. 11]. Cook and Kirkpartick define the privatization process as a range of policies designed to shift in balance between the public and private sector and the services they offer [3, p. 3]. Finally, Blommestein, Geiger and Hare view privatization

as "any transfer of ownership of a state enterprise to other agents which results in their effective private control of the business" [1, p. 21]. These authors argue that the privatization does not necessarily require a state to sell a majority stake in its enterprises and that a state agency, such as the ministry of finance, may still retain some ownership in privatized companies.

In transition economies, the larger the private sector was, the less complex the transition process was [4, p. 2]. Besides, without a radical change in ownership structure, it was hardly possible to change the economic system [7, p. 11].

Privatization in Serbia was carried out throughout the whole process of transition. The process was initiated back in 1990 by the enactment of the Law on Socially-Owned Capital, and continued by the enactment of the Law on Conditions and Procedure for Conversion of Socially-Owned Property into Other Forms of Property, and the Law on Ownership Transformation. Since 2001, privatization has been carried out in accordance with the provisions of the Law on Privatization.

For purposes of this paper, the privatization process may be defined in a broader sense as the transfer of the state- or socially-owned property or capital to the private sector, followed by the market liberalization designed to stimulate competition.

The literature offers arguments both for and against privatization. Some of the arguments in favor of privatization are that (a) privatization increases the size of the private sector and thus the growth rate, (b) privatization contributes to the technological development and entrepreneurship, (c) private enterprises are more efficient than the stateowned ones, and (d) the privatization process is beneficial for the state budget [2, p. 25]. On the other hand, the same author presents the following arguments against privatization: (a) privatization leads to increase in costs, (b) privatization decreases the employment rate, and (c) privatization leads to loss of quality. In spite of all of the stated arguments, the author concludes that experience has shown that private enterprises are more efficient than the state-owned ones, while the remaining arguments are more theoretical and not well researched.

According to one group of authors, the advantages of privatization are increase in the scope of investments,

better quality of services, innovations and savings of tax payers' money [14, p. 352].

Transition to the market economy represents one of the very important and complex processes, and privatization is one of its key elements. All apparent aspects of market economy are manifested through the privatization process, from the initial causes that cause change to the means of establishing the institutions and mechanisms of the market economy [4, p. 2].

At the macroeconomic level, privatization should lead to a greater balance of the major aggregates of the national economy, such as investments and production, income and consumption. At the microeconomic level, privatization should ensure better economic performance of companies (lower operating costs, better competitiveness, lower prices, etc.) [8, p. 522].

If the aim of privatization is to rehabilitate economy and to create more successful economic entities capable of generating profit, which would be beneficial not only for these entities and their owners but also for the state, than the real benefit of the ownership transformation is creation of profitable enterprises. In transition economies which have also undergone the privatization process, the growth rate in productivity in the period from 1995 to 2005 was 30% higher than the growth rate of productivity in old European economies [5, p. 7].

## Privatization in Serbia until 2001

In the period from 1989 until 2001, privatization in Serbia was carried out pursuant to the following three laws: Law on Socially-Owned Capital, Law on Conditions and Procedure for Conversion of Socially-Owned Property into Other Forms of Property, and the Law on Ownership Transformation.

In that respect, the privatization process in Serbia may be divided into several stages:

 The first stage (1990-1991) is characterized by the enactment of the Law on Socially-Owned Capital which was very liberal, where the privatization process was decentralized and the role of the state was nearly eliminated.

2. The second stage (1991-1994) was carried out pursuant to the Law on Conditions and Procedure for Conversion of Socially-Owned Property into Other Forms of Property of the Republic of Serbia. Under this Law, the enterprises of strategic significance to the state were nationalized and excluded from the privatization.

- 3. The third stage (1994-1997) was characterized by the annulment of the whole privatization effort that was previously carried out. Nearly 500 enterprises which had initiated the privatization process by 1994, demanded protection before the Commercial Court at the time, while the participation of share capital in economy was reduced from 43% to only 3%.
- 4. The fourth stage (1997-2001) was based on the implementation of the Law on Ownership Transformation. For the first time, it was possible to distribute a major portion of the enterprise's equity (60%) free of charge. Privatization was carried out for the most part by enterprises themselves. The state, however, was not prepared to bring the process to its completion.
- 5. The fifth stage (from 2001 to present) is characterized by the enactment of the new Law on Privatization, Law on Privatization Agency, Law on Share Fund, and the supporting bylaws. This law envisages sale of state- and socially-owned companies to interested investors, which enables ownership concentration and more efficient corporative control. During this period, the state has shown determination to complete the privatization process.

The privatization methods used in Serbia until 2001 were internal privatization, external privatization, and free-of-charge share distribution to general public. The predominant privatization model until the enactment of the new Law on Privatization in Serbia was the employee share ownership model.

General characteristics of all the previously mentioned laws were the following: eligibility for acquiring shares was based on the years of employment in either the stateor socially-owned enterprises; the decision to initiate the privatization process depended on the enterprise itself; and, finally, there was no time limit defined for the process to be completed. The first characteristic favored employed and retired persons. Depending on the years of employment, employees would acquire either shares or the right of their repayment under preferential conditions (under the Laws of 1991 and 1994) or would acquire shares for free (under the Law of 1997).

The second characteristic allowed the legal entity being privatized to decide for itself whether it would initiate the privatization process or not.

Finally, the third characteristic was the absence of a time limit or an obligation set to carry out the procedure. Therefore, the legal entity being privatized was under no obligation to undergo the privatization process. Under the currently valid Law on Privatization, the legal entities being privatized are not free to decide whether they do or do not want to initiate the privatization process; rather, the period of time within which the privatization process is to be completed is defined by the Law.

Up until the mid 2000, about 10% of the sociallyowned capital in Serbia was privatized. The privatization results by November 2000 are shown in Table 1.

## Table 1: Privatization results in Serbia as ofNovember 2000

	Number of enterprises
Initiated privatization	428
Registration completed in the first round	284
Registration completed in the second round	246
Completed privatization	18
	D     2000

Source: Report of the Enterprise Value Assessment Agency, Belgrade, 2000

Based on the above data, it could be concluded that the results achieved by the end of 2000 were rather modest. This was the result of not only the adverse external circumstances but also the characteristics of the selected model, since the employee share ownership model proved to be just another unsuccessful alternative to the social ownership.

## Privatization after 2001

#### Conceptual framework

As we have shown thus far, the total effect of privatization in Serbia until democratic changes in 2000 was minimal, primarily due to the absence of clear determination of the political elite in power at the time to implement the reforms and transition to the market economy.

Due to the country's isolation, the condition of the Serbian economy as a whole as well as the state- and sociallyowned enterprises was rather poor by the beginning of 2001. On the other hand, Serbia's opening to the world and the institutional changes in 2001 contributed to its image as more attractive destination for direct foreign investments. This, in turn, enabled the privatization process to be based on the sale of state- and sociallyowned enterprises to interested investors. In that respect, a new Law on Privatization was enacted in 2001, with a new privatization concept defined as a sale of equity of the socially- and state-owned enterprises to interested investors through public tenders and public auctions.

Advantages of the sale model were significant and they suited the needs of Serbia at that time. Firstly, the straight sale of enterprises would ensure the best possible management which, from the point of view of economic efficiency, is the most important issue in any privatization process. A healthy and an efficient economy, capable of long-term economic growth require sound management of the enterprises being privatized. Alternative models, such as voucher privatization and employee share ownership, failed to ensure good enterprise management. Secondly, the sale of state- and socially-owned enterprises generated much needed revenues for the state, which were then used to reduce the debt burden, cover the fiscal deficit, reduce the level of taxes and contributions, and provide welfare financing.

In the meantime, the Law on Privatization has been changed and amended three times: in 2003, 2005 and 2007. The adopted changes and amendments to the Law were designed to enable a more efficient completion of the privatization process, while the basic concept remained unchanged.

Under the new Law, the object of privatization is the socially- and state-owned equity in enterprises and other legal entities, as well as the assets of the legal entities being privatized. Natural resources and assets of general importance are not subject to privatization. Besides that, privatization also refers to the change of ownership over the remaining part of the socially- or state-owned equity in enterprises which had partially carried out the ownership transformation in accordance with the provisions of earlier privatization laws.

The Law on Privatization envisages two basic privatization models: the sale of the socially- and stateowned equity and assets, as well as the transfer of the socially- and state-owned equity without compensation. The sale model relates to the sale of majority stake in equity directly to interested investors through public tenders or public auctions. The transfer of the remaining minority equity stake without compensation is carried out in the following two ways: by the transfer of shares to the employees of the legal entity being privatized, in accordance with the criteria set under the Law, and by the transfer of shares to the general public. Also, in accordance with the new legislation, the general public is also entitled to cash compensation from the funds generated by the sale of shares which are registered in the Privatization Register.

Sale of equity or assets of the legal entities being privatized is carried out by the following *two methods*: public tenders or public auctions. Both methods envisage transparency and competitiveness during the privatization process. Even though it is not explicitly set under the Law, it can be inferred that all large enterprises are to be privatized through a tender process while the privatization of the medium and small size enterprises is carried out through public auctions. Both methods are carried out by the Privatization Agency. The two privatization methods, as stipulated in the new Law, are depicted in Figure 1.

As shown in Figure 1, the object of privatization is equity of the socially- and state-owned enterprises. Using two privatization methods – public tenders and public auctions – up to 70% of equity is sold, while the remaining stake is transferred without compensation. In case of sale of equity through public auctions, 30% of equity stake is transferred to employees without compensation. In the case of sale of equity through public tenders, 15% of equity stake is transferred to employees with the remaining 15% to the Privatization Register. The implementation of these two privatization methods may be preceded, if necessary, by the restructuring of the enterprises, in order to increase their attractiveness in the privatization process.

	Number of public announcements	Number of companies offered for sale	Number of privatized companies	Success rate	Book value of equity	Sales proceeds	Price/Book	Required investments	Social program
Tenders (T)	301	217	128	59%	1,320,993	1,619,750	1.23	1,185,405	278,731
Auctions (A)	4,064	2,459	2,155	88%	1,333,097	1,388,870	1.04	281.79	-
T+A	4,365	2,676	2,283	85%	2,654,090	3,008,620	1.13	1,467,195	278,731
Auctions on financial markets (Tk)		2,699	1,662	62%	682,997	684,342	1.00	5,902	-
Total T+A+Tk		5,375	3,945	73%	3,337,087	3,692,962	1.11	1,473,097	278,731

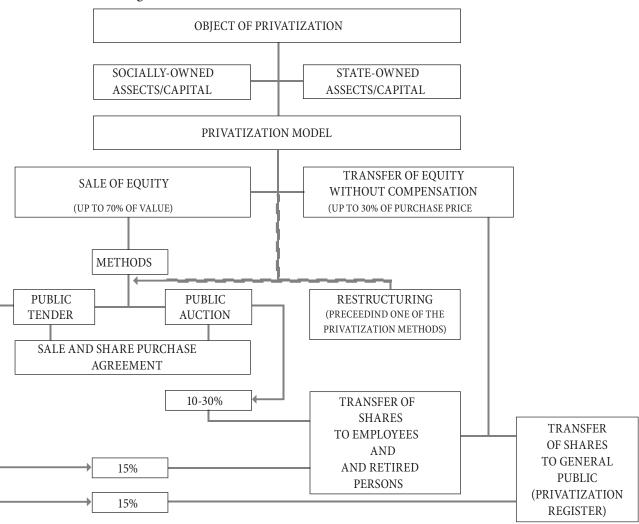
Table 2: New privatization model results as of December 31, 2011 (in EUR 000)

### Model implementation results

From 2002 until the end of 2011, a total of 3,945 enterprises have been privatized with the total sale proceeds amounting to EUR 3.7 billion. Besides, the required capital investments guaranteed by the buyers for further development of privatized enterprises amounted to around EUR 1.5 billion. Table 2 summarizes the effects of the new privatization model in Serbia since 2001 until the end of 2011.

The aforementioned results are further analyzed in more detail. The criteria used for the analysis were the number of privatized enterprises, ratio of offered for privatization vs. privatized enterprises, sale proceeds,

#### Figure 1: Privatization methods under the new Law on Privatization



Privatization method	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total
Tenders	12	19	9	16	25	17	19	7	2	2	128
Auctions	206	681	254	201	209	282	226	69	25	2	2,155
Auctions on fin. markets	48	116	65	295	307	352	254	109	54	62	1,662
Total	266	816	328	512	541	651	499	185	81	66	3,945

Table 3: Total number of privatized enterprises (2002-2011)

price to book ratio (P/B), required investments, and the structure of buyers.

#### Number of privatized enterprises

Table 3 shows the number of companies that were privatized through public tenders and public actions from 2002 until the end of 2011. As shown in the table, the number of privatized companies increased in 2003, especially the ones sold through the public auctions. In 2004, that number decreased significantly, due to the parliamentary elections and the long process of selecting the new government. Since 2009, the number of enterprises being privatized has been decreasing gradually, with the least number of companies privatized in 2011.

Figure 2 shows the number of privatized companies through public tenders and public auctions. It can be concluded that the largest number of enterprises was privatized through the public auctions and auctions on financial markets (56% and 41% respectively), while only 3% of the companies were privatized through public tenders. The presented results are logical since most enterprises offered for privatization were small and medium size companies that were intended to be privatized through public auctions.

## Ratio of offered for privatization vs. privatized enterprises (success rate)

Table 4 shows the relationship between the number of companies offered for privatization and the number of privatized companies from 2002 to 2011. A high success rate (calculated as a ratio of offered for privatization to number of privatized companies) was realized during the first couple of years of the new model implementation. With the passage of time, this rate gradually decreased since the remaining companies for privatization were less attractive.

Until the end of 2007, the success rate was higher in the privatization through public auctions than public tenders, while in 2010 and 2011 this rate was higher for public tenders.

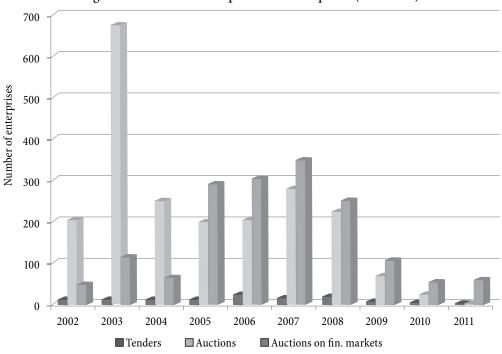


Figure 2: Total number of privatized enterprises (2002-2011)

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Privatization method	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total
Tenders	46%	50%	82%	76%	86%	38%	73%	78%	40%	50%	59%
Auctions	100%	96%	85%	89%	93%	95%	74%	58%	38%	29%	88%
Auctions on fin. markets	80%	105%	31%	88%	79%	68%	76%	38%	28%	24%	62%
Total	91%	95%	64%	88%	84%	76%	75%	44%	31%	25%	73%

Table 4: Ratio of offered for privatization vs. privatized enterprises

Table 5: Total sales proceeds from privatization (in EUR 000)

Privatization method	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total
Tenders	200,771	600,361	15,205	96,586	101,202	81,956	491,673	31,525	450	1,021	1,619,750
Auctions	60,425	272,441	120,059	172,547	161,736	358,984	191,676	43,968	6,923	111	1,388,870
Auctions on fin. markets	82,968	67,778	52,219	125,195	70,108	162,148	84,778	10,465	11,646	17,037	684,342
Total	344,164	940,580	187,483	393,328	333,046	603,088	768,127	85,958	19,019	18,169	3,692,962

Source: Privatization Agency (www.priv.rs)

#### Sale proceeds from privatization

Table 5 shows the level of sales proceeds that was realized from the sale of privatized companies in the period from 2002 to 2011.

The highest level of proceeds was achieved in 2003, while the figure for 2010 and 2011 was rather low. Figure 3 presents the breakdown of realized sales proceeds for different privatization methods. As shown, proceeds realized from public tenders are higher than proceeds from public auctions.

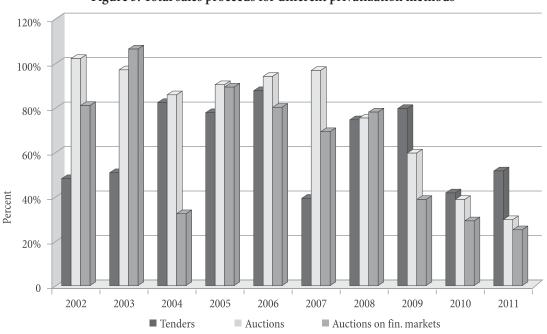
Around 44% of the total proceeds were realized from public tenders, 38% from public auction and the remaining 18% through the auctions on financial markets.

#### Price to book ratio (P/B)

One of the key indicators of the success of the new privatization model is the relationship between the purchase price for equity compared to its book value (P/B ratio). Table 6 shows the price to book ratio for different privatization methods from 2002 to 2011.

On average, for the analyzed period, the P/B ratio for public tenders amounted to 1.23, indicating that the realized price for equity offered for privatization was higher than its book value. The P/B ratio for public auctions was lower but still higher than 1.

It is important to emphasize that, in general, the book value of equity of socially- and state-owned companies



#### Figure 3: Total sales proceeds for different privatization methods

Privatization method	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total
Tenders	1.25	1.36	0.23	0.8	1.76	0.89	9.71	0.1	0.03	0.16	1.23
Auctions	0.74	0.76	0.59	1.2	1.07	1.4	2.31	0.95	0.92	0.4	1.04
Auctions on fin. markets	2.76	0.78	0.8	1	0.91	1.04	0.95	0.54	0.78	0.83	1
Total	1.27	1.06	0.56	1.02	1.16	1.2	3.47	0.23	0.48	0.67	1.11

Table 6: Price to book ratio (P/B) analysis

is undervalued. There are more explanations for this, the major one being that the value of companies' assets is usually understated and well below its market value. This would lead us to conclude that the real average P/B ratio is probably below 1 for all three privatization methods. If, however, value of required investments and social programs is added to the price paid for shares (as an indicator of the total transaction value), the P/B ratio would probably be even higher than shown in Table 6. *Amount of required investments* 

One of the indicators of the success of the new privatization model is the required investments into privatized companies that were guaranteed by the buyers. As already mentioned, one of the major goals of the new privatization concept was to attract investors who would bring management, new equipment and technologies, know-how, etc., thus increasing the efficiency of the privatized companies. In that respect, apart from the purchase price, the buyers were required to guarantee a certain level of capital investments as well as the social programs. Table 7 shows the amount of required capital investments that were guaranteed by the buyers to be invested into privatized companies from 2002 to 2011.

The highest figure of required investments was realized in 2003 for both public tenders and public auctions. If these figures are compared to the total numbers of privatized companies, it can be concluded that the average amount of required investments per companies privatized through public tenders was EUR 9,261,000, while the average amount of required investments per companies privatized through public auctions was EUR 131,000.

Table 8 shows the relationship between the amount of required investments and the book value of equity in the privatized companies from 2002 to 2012.

As stated in the table, the ratio of required investments to book value of equity for companies privatized through public tenders was higher than for public auctions. This result is a consequence of the fact that the companies privatized through public tenders were large and required more additional capital investments in absolute terms. *Structure of buyers* 

In the analyzed period of time from 2002 to 2011, most of the buyers in the privatization process were domestic investors from Serbia. Those investors usually participated in public auctions acquiring smaller companies. Less than 7% of all investors that participated in the privatization process under the new Law were foreign investors. Out of 1,600 enterprises that were privatized until 2006, around 130 were bought by foreign investors [11, p. 126]. It should be noted, however, that foreign investors mostly participated in the privatization of large enterprises through public tenders.

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Privatization method	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total
Tenders	305,152	318,612	75,007	73,719	206,463	85,122	80,939	31,493	4,598	4,300	1,185,405
Auctions	14,297	61,548	47,746	42,379	42,503	49,291	11,092	11,544	1,345	45	281,790
Total	319,449	380,160	122,753	116,098	248,966	134,413	92,031	43,037	5,943	4,345	1,467,195

Table 7: Amount of required investments (in EUR 000)

Source: Privatization Agency (www.priv.rs)

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Privatization method	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total
Tenders	1.91	0.72	1.16	0.61	3.60	0.92	1.60	0.10	0.27	0.69	0.90
Auctions	0.17	0.17	0.23	0.29	0.28	0.19	0.13	0.25	0.18	0.16	0.21
Total	1.32	0.48	0.46	0.44	1.19	0.39	0.69	0.12	0.24	0.67	0.55

Source: Privatization Agency (www.priv.rs)

Table 9: Privatization results achieved through public tenders (2002-2011)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total
Number of public announcements	49	46	14	29	41	60	35	15	5	4	301
Number of companies offered for privatization	26	38	11	21	29	45	26	9	5	4	217
Number of privatized companies	12	19	9	16	25	17	19	7	2	2	128
Number of nullified contracts	1	3	3	7	11	11	7	2	0	1	46
Number of employees	11,977	15,927	11,984	9,372	21,633	12,271	9,675	2,963	178	578	96,588
Average number of employees	998	838	1,332	586	865	722	509	423	89	289	6,651
Book value of equity in 000 EUR	160,016	441,199	64,867	119,949	57,416	92,379	50,607	311,565	16,751	6,244	1,320,993
Sales proceeds in 000 EUR	200,771	600,361	15,205	95,586	101,202	81,956	491,673	31,525	450	1,021	1,619,750
Required investments in 000 EUR	305,152	318,612	75,007	73,719	206,463	85,122	80,939	31,493	4,598	4.3	1,181,109
Social program in 000 EUR	147,069	129,025	2,587	50	-	-	-	-	-	-	278,731

# Privatization results achieved through public tenders

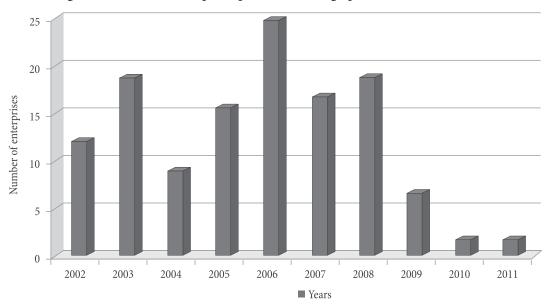
Table 9 provides a detailed summary of the privatization results achieved through public tenders, including the number of public announcements, number of companies offered for privatization and privatized companies, number of employees, book value of equity, sales proceeds to the state, amount of required investments and social programs, etc.

As shown in the table, the total number of companies that were offered for privatization through public tenders from 2002 to 2011 was 217, out of which 128 were successfully privatized (the success rate of 59%). The largest number of tender privatizations occurred in 2006, while the least in 2010 and 2011. Of all the privatized companies, 46 contracts with the buyers have been nullified in the meantime.

Figure 4 shows the number of tender privatizations that occurred in period 2002-2011. As already mentioned, the largest number of companies was sold in 2006 (a total of 25 companies), while the least number was privatized in 2010 and 2011 (only two companies in each year).

If we compare the number of companies offered for privatization to the number of privatized companies, as shown in Figure 5, it can be concluded the highest success rate was achieved in 2006 (86%), while the lowest rate occurred in 2007 (38%).

Total sales proceeds from public tenders amounted to EUR 1.62 billion. The price realized for the sale of equity was significantly higher than the book value of equity,





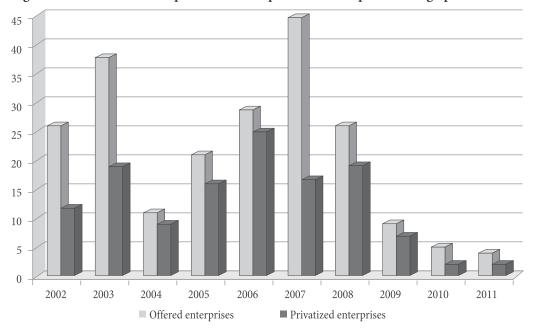


Figure 5: Ratio of offered for privatization vs. privatized enterprises through public tenders

with the price to book ratio (P/B ratio) of 1.23. The highest proceeds were realized in 2003, while the lowest occurred in 2010. The total number of employees in the companies that were sold through public tenders was 96,558.

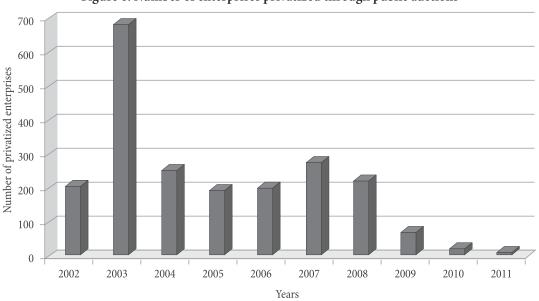
Based on the above-mentioned results, the privatization model through public tenders was very important for the development of the Serbian economy as a whole and the achieved results have been impressive. Since these companies, because of their size, needed more time to find appropriate buyers, lesser number of socially-owned companies was offered for sale through public tenders compared to public auctions but now they represent the leaders in their respective industries. The high success rate indicates that public tenders are the appropriate privatization method for large enterprises while the low number of contracts that were later nullified indicates that the process was well organized and that the selected buyers/investors were appropriate. The price to book ratio is higher for public tenders than for public auctions, which also indicates the effectiveness of this privatization method.

In addition, the public tenders' method required from the buyers to guarantee a certain level of investments ("required investments") as well as to provide a social program to resolve the excess workforce. From 2002 to 2011, total required investments amounted to almost EUR 1.2 billion, while the investments in social programs amounted to EUR 279 million. Through the required investments, the public tenders' method attracted strategic investors that introduced new technologies and know-how, increased productivity and improved corporate governance in privatized companies. Additionally, by providing additional investments in social programs, buyers enabled the government to use the privatization proceeds for other purposes, namely macroeconomic stability and infrastructure projects.

14010 10.1	Table 10. 111valization results achieved through public auctions (2002-2010)													
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total			
Number of public announcements	409	1014	492	406	449	461	536	211	70	16	4,064			
Number of companies offered for privatization	207	709	298	227	225	296	306	119	65	7	2,459			
Number of privatized companies	206	681	254	201	209	282	226	69	25	2	2,155			
Number of nullified contracts	55	166	72	43	54	113	89	23	7	0	622			
Number of employees	15,125	59,935	27,651	22,662	21,845	26,610	7,517	3,160	689	112	185,306			
Average number of employees	73	88	109	113	105	94	33	46	28	56	745			
Book value of equity in 000 EUR	81,890	357,831	204,868	143,961	151,480	255,957	82,928	46,376	7,529	277	1,333,115			
Sales proceeds in 000 EUR	60,425	272,441	120,059	172,547	161,736	358,984	191,676	43,968	6,923	11	1,388,770			
Required investments in 000 EUR	14,297	61,548	47,746	42,379	42,503	49,291	11,092	11,544	1,345	45	281,790			

Table 10: Privatization results achieved through public auctions (2002-2010)

Source: Privatization Agency (www.priv.rs)



#### Figure 6: Number of enterprises privatized through public auctions

# Privatization results achieved through public auctions

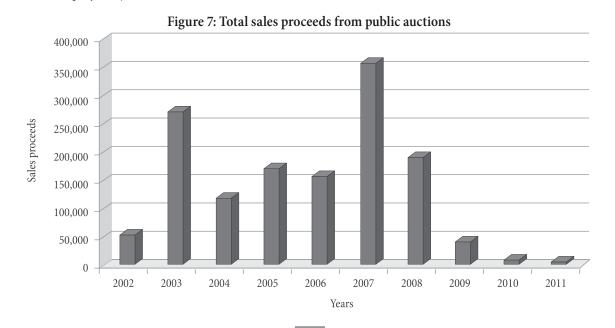
Table 10 provides detailed analysis of the privatization through public auctions from 2002 to 2011. The selected criteria for analysis include the number of public announcements, number of companies offered for privatization as well as the number of privatized companies, number of employees, sales proceeds, book value of equity, etc. From 2002 to 2011, a total of 2,459 companies was offered for privatization through public auctions, out of which 2,155 were sold, representing a success rate of 88%. The biggest number of companies was sold in 2003, while the least number of companies was privatized in 2011, as shown in Figure 6.

Table 11 shows the success rate of the public auctions from 2002 to 2011.

The highest success rate in the privatization process

		-		•		•		• •			
Privatization method	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total
Auctions	100%	96%	85%	89%	93%	95%	74%	58%	38%	29%	88
Source: Privatization Agency (www.r	riv.rs)										

Table 11: Ratio of offered for privatization vs. privatized enterprises through public auctions



through public auctions was realized in 2002 (100%), while the lowest rate occurred in 2011 (29%). Figure 7 shows the amount of realized sales proceeds from public auctions from 2002 to 2011.

Total proceeds from public auctions equal EUR 1.39 billion and are slightly higher than the book value of equity that was offered for privatization (EUR 1.33 billion), thus indicating the price to book ratio of 1.04.

As shown in Figure 7, the highest level of proceeds was realized in 2007, while the lowest occurred in 2011, with only two companies sold through public auctions in that year. Total number of employees in companies that were privatized through public auctions was 185,306.

In summary, compared to public tenders, far greater number of companies was privatized through public auctions. This comes as no surprise since there were many more small and medium size companies that entered the privatization process through public auctions. In addition, the success rate (calculated as a number of companies offered for privatization compared to the number of privatized companies) is higher for public auctions compared to public tenders (88% vs. 59%) in the period from 2002 to 2011.

In spite of larger number of companies privatized through public auctions, total sales proceeds from public auctions were lower compared to public tenders, both in absolute terms and per individual companies. In addition, the amount of required investments is lower for companies privatized through public auctions than through public tenders. Finally, the price to book ratio is also lower for public auctions (1.04), compared to public tenders (1.23).

Although the sales proceeds were lower compared to public tenders, public auctions have proven to be effective and efficient method of privatization of small and medium size companies in a relatively short period of time.

## Conclusion

In conclusion, we would like to summarize the results achieved by the implementation of the new Law on Privatization in order to test the hypotheses defined in the introduction. Firstly, we shall determine whether the sale of equity of socially- and state-owned enterprises, as a privatization method, is the most adequate one in the period of delayed transition. Secondly, we shall prove the hypothesis that the public tender is the most adequate privatization method for sale of large enterprises, while the public auctions are best suited for the privatization of small and medium size enterprises.

Serbia restarted the privatization process in 2001 – at the time when this process was nearly completed in other Central and Eastern European countries. This fact presented an advantage for Serbia to define a new privatization model in such a way to avoid mistakes made by other countries in the privatization processes. Besides, Serbia entered the privatization process with an economy which, after the years of sanctions and isolation, was on its knees and required not only fresh foreign capital, know-how and new technologies but also a clearly identified owner who would take responsibility for the enterprise's business. All these elements had an impact on the definition and selection of the appropriate privatization model, which was then defined under the new Law on Privatization in 2001.

Based on the implementation results shown in this paper, in can be concluded that ten years after the beginning of the implementation of the new Law, a total of 3,945 enterprises have been privatized, out of which 128 through public tenders, 2,155 through public auctions and 2,699 through auctions on financial markets. The largest number of companies was privatized during 2003 and 2007, while the highest sales proceeds were achieved in 2003 and 2008.

In addition, the success rate defined as a ratio of number of offered vs. number of privatized enterprises is rather high. This rate amounts to 59% in case of public tenders while the figure for public auctions is even higher and equals 88%.

The price to book ratio (the ratio between the sales price and the book value of equity) for all privatization methods cumulatively equals 1.11, indicating that the method of sale was successful to achieve price for equity that was higher that its book value.

The amount of required investments that buyers guaranteed through the privatization process was largest

in 2002 and 2003. In the analyzed period, the ratio between the amount of the required investments and the book value of equity was 0.9 and 0.21, for public tenders and public auction respectively. The higher ratio for the tender privatization is the consequence of larger companies requiring more investments in absolute terms.

In summary, ten years following the day of initiation of the privatization process under the new Law, it can be concluded that the results of the new model are much better than the results achieved under the Law on Ownership Transformation of 1997, as indicated in Table 12.

Firstly, the number of enterprises sold under the new Law is far greater than the number of enterprises privatized under the Law on Ownership transformation, even though the number of enterprises sold is not taken as the prevalent criterion for the assessment of the privatization success. In addition, the enterprises sold under the Law of 2001 generated substantial cash revenues for the state, with additional investment and social programs what were financed by the buyers.

Secondly, because of its transparency, the selected method was acceptable to both foreign and local investors who brought in their capital, knowledge and technology to the privatized enterprises thus contributing to the increase in their competitiveness.

Finally, the method of sale enabled the state to generate substantial budget revenues (as opposed to the privatization method of free share distribution), which it later used for macroeconomic stability and infrastructure projects.

The above results support the *first hypothesis* of this paper that the selected privatization method – the method of sale – is the most adequate method of privatization in delayed transition. The new method contributed to both the privatization of a large number of enterprises in a

relatively short period of time and the attraction of the "right" investors who improved business of the privatized enterprises. Additionally, implementation of the new model ensured a large influx of funds into the state budget and contributed to the improvement of macroeconomic stability in Serbia.

Privatization results presented in this paper also prove the second hypothesis, namely that public tender is the most adequate privatization method for large enterprises while public auctions are best suited for the privatization of small and medium size companies. Privatization through public tenders is a more complex process than privatization through auctions, considering the size of the privatized companies as well as the government's goal to attract strategic investors that usually need more time to decide whether to invest or not. In case of public auctions, on the other hand, companies are smaller, the due diligence process is shorter and the buyer is not necessarily from the same line of business. In that respect, revenues generated from public tenders as well as the amounts of required investment and social programs are far greater than those generated from public auctions. Privatization through public auctions, however, is faster and results in a greater number of privatized enterprises.

It would be unrealistic to expect the privatization process alone to bring prosperity to a nearly devastated economy such as Serbian, in a relatively short period of time. Besides, privatization is only one of the factors contributing to the success of the transition process as a whole. It is, however, hard to dispute that the new privatization concept was well suited to the political and economic circumstances that prevailed in Serbia in 2001 and that the results achieved in the meantime are impressive. The privatized enterprises are now at the forefront of the economic activity and employment in Serbia.

	Number of enterprises sold	Sales proceeds	Required investments	Social program	Number of employees
Tenders (T)	128	1,619,750	1,185,405	278,731	96,558
Auctions (A)	2,155	1,388,870	281.79	-	185,306
Auctions on financial markets (Tk)	1,662	684,342	5,902	-	141,839
Total (T+A+Tk)	3,945	3,692,962	1,473,097	278,731	423,703
Law on Ownership Transformation (1997)	775	-	-	-	198,632

Source: Privatization Agency (www.priv.rs)

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He graduated from the School of Economics, University of Belgrade and received Master of Arts degree from the same school. As a Ron Brown Scholar, Mali also received Master of Business Administration degree (MBA) from Olin Business School, Washington University in St. Louis, USA, with concentration in Finance. He is currently in the process of completing his PhD dissertation at the Faculty of Organizational Sciences, University of Belgrade.

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