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From welfare to wealth creation: A review of the literature on privatization of state-owned enterprises

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A review of the literature on privatization of state-owned enterprises

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Abstract

Purpose – The purpose of this paper is to review several influential empirical studies that examine the performance of state-owned enterprises (SOEs). The paper undertakes a citation analysis of journals, authors and titles in the area of privatization and firm performance in general, and assesses the impact of privatization on the performance of SOEs in particular.

Design/methodology/approach – The methodology is based on a systematic and structured review of over 100 papers published in economics, public management, business strategy and related social sciences. The systematic review is based on citation analysis of journals, authors and titles. The journal and author citation counts were tabulated by leveraging the databases of SCImago Journal Rankings and Google Scholar and filtered it to find out the most highly cited journals and authors. The structured review is based on the framing opinion with respect to major findings, variables selected, measurement techniques and statistical tools applied by different researchers. The impact is measured through coding a value "P" in case of positive effects, "N" in case of negative effects and "NT" in case the study found both positive and negative effects.

Findings – The citation analysis reveals that *American Economic Review*, *Journal of Financial Economics*, *Review of Financial Studies* and *Journal of Finance* as the top-cited journals, and Megginson and Netter (3,468), Megginson *et al.* (1,737), Djankov and Murrell (1,356), Boardman and Vining (1,320), Balsam *et al.* (1,094) and DeWenter and Malatesta (1,018) as the top-cited authors in this particular research field. While majority research studies have revealed a significant improvement in the performance of SOEs in the post-privatization period, few studies have reserved their impact as neutral or even negative in some respects.

Originality/value – Given that economic transitions, corporate governance, and performance of SOEs have attracted a great attention from public management and business strategy scholars in recent years, this paper aims to summarize a large number of empirical studies that examine the performance of SOEs. The paper would be useful to future researchers especially the beginners and early career researchers in terms of its current trends, selection of variables, measurement techniques and statistical tools applied.

Keywords Corporatization, Financial performance, Privatization, State-owned enterprises, Disinvestment, Performance contract

Paper type Literature review

1. Introduction

The performance of "state-owned enterprises" (SOEs)[1] has been deteriorating over the last few decades due to cut-throat competition fueled by de-regulation, globalization and opening up most economic sectors to private investors (recent exemplary work on globalization and governance of SOEs: Cuervo-Cazurra *et al.*, 2014; Bruton *et al.*, 2015; Grossi *et al.*, 2015; Reddy *et al.*, 2016b). Public policy makers around the world were left with minimal policy options at a time when their performance caused not only administrative headaches but also political nightmare (Kim and Chung, 2008; Alexius and Örnberg, 2015). The continued dismal performance of SOEs has been persuading the public authority to undertake massive structural reforms including disinvestment and privatization[2] in extreme cases. It is widely believed that the transition of ownership from the state to market leads to enhanced efficiency, profitability and sustainability of the enterprise. Privatized firms are more efficient than SOEs as the profit motive is usually absent for public firms and they are instead bound by other social objectives (Hartley and Parker, 1991). Privatization has now become a part and parcel of the economic reforms agenda in every part of the world

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and researchers continue to target it for both theoretical and empirical work (Omran, 2004; Christensen, 2015).

First, researchers who have found a significant improvement in the post-privatization performance of firms include Megginson *et al.* (1994), Djankov and Murrell (2002), Wolf and Pollitt (2008), Pratap (2011), Kumar (2014) and Ojonugwa and Lrunmoluo (2015). They claim that privatization leads to improvement in performance of firms as they do away with political interferences and divert their attention towards economic objective of maximizing returns over their investment.

Second, there are researchers who took a neutral position and believe that privatization may or may not improve firm performance, inter alia, include Megginson and Netter (2001), Jain (2011), Rastogi and Shukla (2013), Potter (2015) and Khurud and Abhang (2016). On the other hand, they are of the view that though privatization may provide room to improve efficiency and hassle-free working environment, it may convert into private monopoly which is more dangerous than public monopoly. Parker (2004) concluded that effective privatization requires an ecosystem of competition and regulation as evident from UK's experience to ensure that state monopolies does not turn into private monopolies which is more painful.

Third, researchers who believe that privatization does not have any significant effect on firm's performance include Nagaraj (1997), Bevan *et al.* (1999), Gupta (2005), Sathye (2005), Nagaraj (2006), Bortolotti and Milella (2006), Paterson *et al.* (2006), Pietrogiovanna (2010), Mohamed (2010), Ntiri (2010), Kousadikar and Singh (2013), Ritu (2015) and Poczter (2016). They argued that the real problem of public sector is not the lack of efficiency but one of pricing and collection of user charges; unless these problems are squarely addressed, public sector performance are unlikely shape up.

There is no doubt that the gains of privatization comes with a certain cost such as increase in price level, artificial shortage of resources, formation of like-minded cartel, job insecurity, social security and safety net, corporate social responsibility and protection of stakeholder's rights. The social welfare element is affected because of their profit maximizing behavior and looking for only affordable customers rather than serving the society at large.

In view of above discussions, it is pertinent to review the effectiveness of privatization of SOEs, the following research question explores that:

RQ1. How it affects productivity, efficiency and profitability of an enterprise so as to reach to a policy view on whether further privatization needs to be continued? If so then to what extent and direction?

In the past, researchers have reviewed independent and/or collaborative assessment on post-privatization performance and corporate governance of SOEs (Megginson and Netter, 2001; Grossi *et al.*, 2015; Daiser *et al.*, 2017). However, their findings are diverse, inconsistent and/or inconclusive with each other due to different approaches of researchers with regard to the selection of variables, sample size, measurement techniques and reliability of data incorporated. Hence, a comprehensive analysis of multi-disciplinary research works that have taken place in the field of privatization of SOEs is required under one roof for better understanding and clarity on the actual impact of privatization. In this study, an attempt has been made to:

(1) undertake a citation analysis of journals, authors and titles to get an understanding of the recent trends and patterns of research in this particular field, and

(2) consolidate the impact of privatization on the performance of SOEs, the range of variables and measurement techniques applied by different researchers, prevailing research gaps and to provide a direction for future research, especially to the starters.

The remainder of the paper is structured as follows. Section 2 stipulates the methodology, Section 3 covers analysis and discussion and this is followed by implications, limitations, future research recommendations and conclusion.

2. Methodology

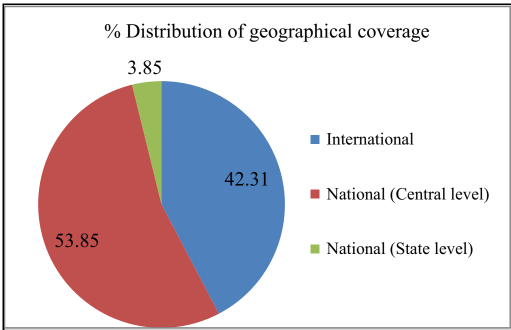
The research works in these areas were identified from journals, organizations and institutions. the methodology is based on a systematic and structured review of literature. Unlike other literature reviews in public sector management and economics (Megginson and Netter, 2001; Grossi *et al.*, 2015; Bouwman and Grimmelikhuijsen, 2016; Daiser *et al.*, 2017), the systematic review is based on the citation analysis of journals, authors and titles. For conducting citation analysis, we have considered Elsevier's Scopus indexed SCImago Journal Ranking (SJR) database for journal citation based on keywords search of economics, finance, accounting and management. The search has further been filtered with keywords public sector, SOEs, privatization, disinvestment, ownership structure, autonomy and financial performance to identify relevant journals/ research in this field.

For citation analysis of article and author, we have used the Google Scholar database with keyword search of title, author and abstract. The journal citation and author citation counts were tabulated by using Microsoft Excel from the databases of SJR and Google Scholar and filtered it in the descending order of citation to find out the highly cited journal and highly cited author for a particular title. The journal citation was counted for a period of five years (2011-2015) and total citation has been aggregated. The citation period so chosen was based on data availability, easy manageability and to look at the current trends and patterns of research in this field. The author and title citation was counted as on March 28, 2017.

The structured review is based on framing opinion with respect to the major findings, variables selected, measurement techniques and statistical tools applied by different researchers. The impact is measured through coding a value "P" in case of positive effects, "N" in case of negative effects and "NT" in case the study is having both positive and negative effects. This analysis is based on the assessment of 70 individual research studies over a period of 30 years (1986-2016) especially in the areas of privatization, disinvestment, ownership structure, autonomy and financial performance of SOEs. The study period so chosen is to get an overall up-to-date assessment of privatization since its beginning in the late 1970s (in the west), subsequently spread to the developing and least developed countries in the late 1990s. The researchers have reviewed a total of 99 papers over the past thirty years and were identified from: different journals in the platform of Emerald, Taylor & Francis, Sage, Elsevier, Inderscience, Springer, Proquest, Wiley Online, SSRN and ResearchGate; white papers and reports of organizations such as government departments, World Bank, Organization for Economic Co-operation and Development, PriceWaterhouse Coopers and Inter-American Development Bank; working papers of institutions such as Cambridge, London School of Economics, Indira Gandhi Institute of Development Research; and published and un-published PhD theses of scholars from different universities/schools. The geographical distribution of these papers is given in Figure 1.

3. Analysis and discussion

This section is divided into three sub-sections. While Sub-section 1 covers citation analysis, Sub-section 2 has made an opinion-based assessment of the research papers with respect to variables selected, measurement techniques used and statistical tools applied. Sub-section 3 stipulates the impact assessment of privatization.



Coverage	Country/Region	
Empirical research papers	India	Egypt
	Brazil	South Africa
	Mexico	Peru
	Germany	Argentina
	UK	Bolivia
	Estonia	Nicaragua
	Russia	Morocco
	Poland	Bangladesh
	Nigeria	Pakistan
	Ghana	Afghanistan
	Indonesia	Sudan
	Malaysia	OECD
	Singapore	European Union
	China	South Asia
	Vietnam	Japan
	South Korea	Greece

Figure 1.
Geographical distribution of reviewed research papers

3.1 Citation analysis

3.1.1 Most frequently cited journals. Of the total 22,222 SJR journals database, a list of 882 journals has been selected through keywords search engine on economics, finance, accounting and management. The search was further filtered into the multi-disciplinary sub-category to look for journals in the relevant areas of public sector, privatization, disinvestment, ownership structure, autonomy and financial performance of SOEs. Table AI shows the top-50 highly cited Scopus indexed journals which reflect research papers in the area of privatization, disinvestment, ownership structure, autonomy and financial performance of SOEs. These journals are referred with their country of origin, indexing and total citations count for last five years (2011, 2012, 2013, 2014 and 2015). A glimpse of the table implies that *American Economic Review* tops the list with 10,598 citations in last five years followed by *Journal of Financial Economics* (6,739), *Review of Financial Studies* (6,185), *Journal of Finance* (5,946) and so on.

3.1.2 Most highly cited authors and titles. Table AII enlists the top-50 authors who have published their research papers in the area of privatization, disinvestment, ownership structure, autonomy and financial performance of SOEs. The citation analysis of these authors/titles is carried out based on Google Scholar database as on March 28, 2017. From Appendix 3, it can be viewed that the top-ten most highly cited authors are Megginson and Netter (2001)/(3,468*), Megginson *et al.* (1994)/(1,737*), Djankov and Murrell (2002)/(1,356*), Boardman and Vining (1989)/(1,320*), Balsam *et al.* (2003)/(1,094*), DeWenter and

Malatesta (2001)/(1,018*), Boubakri and Cosset (1998)/(944*), D'Souza and Megginson (1999)/(813*), Gupta (2005)/(502*) and Estrin *et al.* (2009)/(448*), where * represents citation counts.

3.2 Opinion-based assessment

3.2.1 Selection of variables. The extent of variables (such as dependent, independent, control and dummy variables) is different for different studies and is based on the nature of objectives and scope of the proposed study. For the dependent variable "performance," researchers have adopted a variety of performance parameters such as return on sales (ROS); return on assets (ROA); return on equity (ROE); current ratio (CR); earnings per share (EPS); debt equity ratio (DER); return on capital employed (RoCE); net profit margin/profitability (NPM); revenue generation (RG); liquidity; long-term solvency (LTS); total factor productivity (TFP); operational efficiency (OE) and leverage. These performance parameters are selected in such a way so as to represent a comprehensive strength of the SOEs in terms of its profitability, efficiency, liquidity, solvency and market coverage. The authors who have used such proxies as the dependent variable for measuring the performance of firms are given in Table I.

Performance is a relative concept and is affected by a range of factors other than privatization. Many research studies, such as, Megginson and Netter (2001), Cabanda and Ariff (2002), Kikeri and Nellis (2004), Astami *et al.* (2010) advocated that performance of an enterprise may be affected by a variety of factors other than degree of ownership. Researchers have selected the independent/control/dummy variables in such a way so as to present a comprehensive picture of the SOEs in terms of its firm size, firm age, ownership structure, sector operated, degree of autonomy, performance contract, listing in stock exchanges, corporate governance, asset-in-place, financial leverage, financial statement reliability and soft budget constraint. The authors who have used these proxies as independent/control/dummy variables may be referred to at Table II.

3.2.2 Measurement techniques. The most common measurement techniques applied by many researchers may be clubbed into three categories: aggregative analysis, dis-aggregative analysis and firm-level analysis. In aggregative analysis, the performance of all the SOEs in totality was analyzed over a period of time through ratio and trend

Dependent variable	Author (s)/year
ROS	Banaluddin (2007)
ROA	Boardman and Vining (1989), Boubakri and Cosset (1998), Aivazian *et al.* (2005), Banaluddin (2007), Astami *et al.* (2010), Gunasekar and Sarkar (2014)
ROE	Banaluddin (2007)
RoCE	Sathye (2005), Banaluddin (2007), Kumar (2014)
Profitability/NPM	Megginson *et al.* (1994), Omran (2004), Estrin *et al.* (2009), Astami *et al.* (2010), Singh and Paliwal (2010), Gupta *et al.* (2011), Joshi (2001), Jain (2011), Liu *et al.* (2015)
TFP	Estrin *et al.* (2009)
RG	Estrin *et al.* (2009)
CR	Singh
DER	Megginson *et al.* (1994), Liu *et al.* (2015)
EPS	Singh
Liquidity	Gupta *et al.* (2011), Singh and Paliwal (2010), Jain (2011), Joshi (2001)
LTS	Jain (2011)
OE	Megginson, *et al.* (1994), Omran (2004), Gupta *et al.* (2011), Jain (2011)
Leverage	Omran (2004), Gupta *et al.* (2011)

Note: The definition of variables is provided in Appendix 3

Table I. Proxies of dependent variables

Independent/control/ dummy variable	Author (s)/years
Size of the firm	Ozgulbas *et al.* (2006), Astami *et al.* (2010)
Age of the firm	Rajeev and Vani (2004)
Ownership structure	Megginson *et al.* (1994), Martin and Parker (1995), Chibber and Majumdar (1998), Majumdar (1998), Tian (2000), Djankov and Murrell (2002), Udeaja (2006), Wolf and Pollitt (2008), Astami *et al.* (2010), World Bank (2010), Pratap (2011), Huang and Boateng (2013), Gunasekar and Sarkar (2014), Kumar (2014), Jayachitra and Venkatraman (2015), Ojonugwa Lrunmoluo (2015), Liu *et al.* (2015)
Sector operated	Halkos and Salamouris (2002), Astami *et al.* (2010)
Degree of autonomy	Gupta *et al.* (2011), Mathur and Mathur (2010), Gunasekar and Sarkar (2014)
Performance contract/MoU	Gupta *et al.* (2011), Simpson (2013), Gunasekar and Sarkar (2014)
Listing in stock exchanges	Megginson and Netter (2001), Rao and Guha (2006), Banaluddin (2007), Wolf and Pollitt (2008)
Corporate governance	World Bank (2010), Chattopadhyay (2011), Semmar (2012), Som (2013), D'silva and Joseph (2013)
Asset-in-place	Astami and Tower (2006), Astami, *et al.* (2010)
Financial leverage	Astami *et al.* (2010)
Financial statement reliability	Balsam *et al.* (2003), Astami *et al.* (2010)
Soft budget constraint	Gunasekar and Sarkar (2014)
Distributive impact	Mckenzie and Mookherjee (2002)
Employment	Megginson *et al.* (1994)
Organizational issues	Aradhana and Singh (2015)
Pressure groups	Kim and Chung (2008)
IPO	Banaluddin (2007)

Table II.
Proxies of independent/control/ dummy variables

analysis. Further sequencing, staging and phrasing of privatization programs were done to get an understanding of the change in policy direction on SOEs. In the dis-aggregative analysis, SOEs were categorized into distinct groups and their financial performance over a period of time is compared through absolute performance change and relative performance change. In the firm-level analysis, primary data (especially with regard to non-financial issues such as change in the organization's decision-making process, corporate social responsibility, employment, HR and environmental-related aspects, protecting stakeholder's concerns, issues related to social movements/pressure groups/trade unions and organization's preparedness to address such issues) collected through opinion survey, structured questionnaire and face-to-face interviews are analyzed through applying factor analysis and other qualitative techniques such as percentage method. Research studies which have applied these measurement techniques is given in Table III.

3.2.3 Statistical tools. The key statistical tools applied are paired sample test, analysis of variance (ANOVA), multiple regression analysis, cross-section and panel data regression and multiple discriminant analysis. The paired sample test is carried out through a "pre-and-post" or "before-and-after" analysis of select financial parameters to see whether there is any statistically significant difference in the performance of SOEs followed by

Measurement technique	Author(s)/year
Aggregative analysis	Gupta *et al.* (2011)
Dis-aggregative analysis	Omran (2004), Gupta *et al.* (2011),
Firm-level analysis	Mathew (1997), Agrawal (2010), McKenzie and Mookherjee (2002), Simpson (2013), Aradhana and Singh (2015)

Table III.
Applied measurement techniques

privatization. The technique of ANOVA has been applied especially where the sample size is more than 30 and the study needs across the sections analysis.

Multiple regression analysis has been carried out for the cases where the researchers projected the prediction of the value of a variable based on the value of two or more variables. It has been applied especially to identify the variables other than privatization which affects the performance of SOEs, the magnitude and direction of relationship between dependent/criterion variable (i.e. proxy variables of performance) and independent/predictor variable/(s), i.e., privatization and other independent variables.

Panel data regression has been applied specially to analyze how the behavior of an object (firms, individuals, etc.) changes over time through two-dimensional (typically cross sectional and longitudinal) analysis. The data are usually collected over time and over the same individuals and then a regression is run over these two dimensions. The key models that are employed in a panel data regression is fixed effect model or random effect model depending upon whether the error term varies stochastically or non-stochastically over time. For example, Rajeev and Vani (2004) considers panel data relating to 59 state-level PSEs in Karnataka and uses a random effect model to examine the possible factors (age of the enterprise, employment, gross fixed assets, emolument and dummy variables) contributing either positively or negatively to the performance of these enterprises.

Multiple discriminant analysis is used to discriminate between two or more mutually exclusive and exhaustive groups on the basis of some explanatory variables. It is basically used to observe the change in the behavior of two or more dependent/criterion variables. The authors who have applied such techniques are given in Table IV.

3.3 Impact assessment of privatization

An attempt has been made to summarize the effects of privatization on the performance of SOEs. It is believed that in the process of privatization, the extent of ownership holding is diluted and a change in ownership from public to private affects the economic efficiency of the firm. Revisiting the history of literature, the authors have found divergent views among the researchers regarding superiority of the one ownership over the other. Researchers who buy the argument that public ownership is better than private ownership are among others, Bardhan and Roener (1992), Nagaraj (1997), Kole and Mulherin (1997), Omran (2001), Nagaraj (2006), Jones *et al.* (2007), Kuznetsov *et al.* (2008) and Singh and Paliwal (2010). On the other hand, researchers such as Martin and Parker (1995), Chibber and Majumdar (1998), Udeaja (2006), World Bank (2010), Huang and Boateng (2013), Gunasekar and Sarkar (2014), Jayachitra and Venkatraman (2015) claim that private ownership leads to more efficient and widespread outcomes than public ownership. Researchers such as Chibber and Majumdar (1998), Majumdar (1998), Tian (2000), Astami *et al.* (2010), Liu *et al.* (2015) expressed that even mixed enterprises or partial privatization is better than complete public ownership.

Statistical tool	Author(s)/year
"Pre-and-post" or "before-and-after"	Megginson *et al.* (1994), D'Souza and Megginson (1999), Omran (2004), Astami *et al.* (2010), Gupta *et al.* (2011), Singh and Paliwal (2010), Joshi (2001), Jain (2011), Jayachitra and Venkatraman (2015), D'silva and Joseph (2013), Kumar (2014), Liu *et al.* (2015), Ojonugwa and Lrunmoluo (2015)
ANOVA (analysis of variance)	Wolf and Pollitt (2008), Agrawal (2010), Gupta *et al.* (2011), Jain (2011)
Multiple regression analysis	Banaluddin (2007), Kim and Chung (2008), Astami *et al.* (2010), Liu *et al.* (2015), Shi and Sun (2016)
Panel data regression	Rajeev and Vani (2004), Gunasekar and Sarkar (2014)
Multiple discriminant analysis	Agrawal (2010)

Table IV.
Statistical tools applied by the authors

Similarly, a third group of researchers and their studies including Goodman and Loveman (1991), Hartley *et al.* (1991), Bardhan and Roener (1992), Kaur (2004), Parker (2004) argues that efficiency is independent of ownership. They are of the view that the fruits of privatization can be actualized only when it is accompanied by parallel reform measures such as corporate governance, transparency and accountability, shared responsibility and ethical business practices.

An impact assessment has been carried out through coding a value "P" in case of positive effects, "N" in case of negative effects and "NT" in case the study is having both positive and negative effects. The analysis (Table V) shows that majority of the research studies have rated the impact as positive, though few of them have documented the effects as neutral and negative in some respects.

Of the detailed analysis of research studies, around 61 percent (Figure 2) found the positive effects of privatization in terms of improvement in operating efficiency, cost and price efficiency, easy access to market-based finance facility, transparency and good governance, productivity and profitability.

There is ample research evidence which supports the proposition that privately owned firms are more efficient and profitable than its counterpart state-owned firms. Around 15 percent of the research studies suggested that the effects of privatization on the performance of SOEs is negative as it leads to scarcity of resources, increase in prices, exploitation of consumers and marginalized sections, preferential treatments to credible customers, possibility of conversion of public monopoly into private monopoly and all these will reduce social welfare. Therefore, privatization can be seen as a means of development but not an end in itself. Rest 24 percent of the research studies hold the proposition that privatization does have both positive and negative effects (neutral impact) as performance is a relative subject and depends upon other factors including firm-specific traits such as age, size, level of exposure, spirit of competition, sectors operated, regulatory mechanisms, enabling environment for investment, condition of the capital market, prevailing political and economic climate. Therefore, privatization is a necessary but not sufficient condition for improvement of firm's performance. The state must commit to take forward parallel reforms along with the privatization to actualize the performance of SOEs.

4. Implications of the study

The paper prescribes some policy prescriptions which are essential either for maximizing the gains or minimizing the costs of privatization programs of SOEs and would be useful for the public policy makers. These, inter alia, includes inducing competition, robust regulatory mechanisms, global economic and financial conditions, responsiveness of domestic capital market, enabling environment for investment, prevailing socio-political climate, internal restructuring of SOEs before its privatization, holding stakeholders/pre-privatization consultations, strong communication strategy to tackle any uninvited troubles from various pressure groups, etc. The bottomline message is that the state must commit and undertake parallel reforms along with privatization for improving the performance of SOEs (e.g. an alternative to privatization is "contractual buyouts" by Reddy *et al.*, 2016a).

5. Limitations of the study

In this study, an attempt has been made to assess the impact of disinvestment/privatization of SOEs on their performance particularly in the developing countries such as India. Though the study covers few research papers on privatization of SOEs in the socialist economies, future research may concentrate more on economies who have traveled millions of miles especially in the last two decades from their socialist/Marxist approach to a capitalist/market-based economy such as Russia, China, etc. The study has focused mainly on non-financial SOEs as it is widely believed that financial sector has gone an extra mile so far as financial reforms are

S. No.	Author/(s) and year	Impact
1	Liu *et al.* (2015)	P
2	Huang and Boateng (2013)	P
3	Estrin et. al. (2009)	P
4	Joshi (2001)	P
5	Astami *et. al.* (2010)	P
6	Jayachitra and Venkatraman (2015)	P
7	Sathye (2005)	P
8	World Bank (2010)	P
9	Majumdar (1998)	P
10	Kim and Chung (2008)	P
11	Rao and Guha (2006)	P
12	Udeaja (2006)	P
13	Tian (2000)	P
14	Chibber and Majumdar (1998)	P
15	Rastogi and Shukla (2013)	P
16	Ogohi (2014)	P
17	Mathur and Mathur (2010)	P
18	Ojonugwa and Lrunmoluo (2015)	P
19	Aradhana and Singh (2015)	P
20	Kumar (2014)	P
21	McKenzie and Mookherjee (2002)	P
22	D'Souza and Megginson (1999)	P
23	Megginson *et al.* (1994)	P
24	Singh and Paliwal (2010)	P
25	Wolf and Pollitt (2008)	P
26	Omran (2004)	P
27	Halkos and Salamouris (2002)	P
28	Bortolotti and Milella (2006)	P
29	Gupta (2006)	P
30	Gupta (2005)	P
31	Kousadikar and Singh (2013)	P
32	Rastogi and Shukla (2013)	P
33	Megginson and Netter (2001)	P
34	Khurud and Abhang (2016)	P
35	Potter (2015)	P
36	Pratap (2011)	P
37	Djankov and Murrell (2002)	P
38	Uba (2007)	P
39	Shi and Sun (2016)	P
40	Som (2013)	P
41	Semmar (2012)	P
42	Kole and Mulherin (1997)	NT
43	Jones *et al.*(2007)	NT
44	Bortolotti and Milella (2006)	NT
45	Avadhanam and Mishra (2013)	NT
46	Rajeev and Vani (2004)	NT
47	Basant and Mishra (2012)	NT
48	Jindal (2013)	NT
49	Rajeev (2004)	NT
50	Jain (2011)	NT
51	Gupta *et al.* (2011)	NT
52	Banaluddin (2007)	NT
53	Poczter (2016)	NT
54	Paterson *et al.* (2006)	NT

(*continued*)

Table V. Impact assessment of privatization/ disinvestment

S. No.	Author/(s) and year	Impact
55	Ritu (2015)	NT
56	D'Silva and Joseph (2013)	NT
57	Chattopadhyay (2011)	NT
58	World Bank (2010)	NT
59	Gupta (2010)	NT
60	Bardhan and Roener (1992)	N
61	Parker (2004)	N
62	Kuznetsov *et al.* (2008)	N
63	Kaur (2004)	N
64	Agrawal (2010)	N
65	Nagaraj (2006)	N
66	Mathew (1997)	N
67	Pietrogiovanna (2010)	N
68	Mohamed (2010)	N
69	Ntiri (2010)	N
70	Koner and Sarkhel (2014)	N

Table V.

Notes: P, positive impact; N, negative impact; NT, neutral impact of disinvestment/privatization

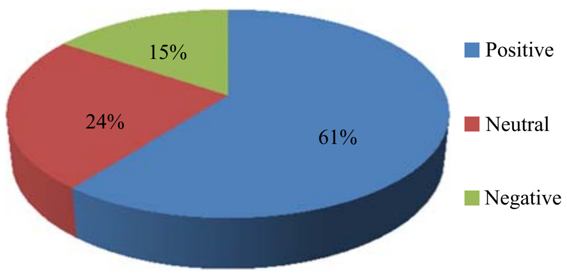


Figure 2.
Impact assessment in terms of percentage

concerned, both public sector and private sector financial institutions/firms are equally competitive in terms of its efficiency, productivity and profitability.

Majority of the papers have considered primarily financial and operational parameters for assessing the improvement of firm's performance. Future researchers may select papers which focuses not only on financial and operational parameters but also other aspects such as employment, wages, performance contract, protection of shareholder's rights, economic value addition, labor movements and anti-privatization, consumer protection, restructuring issues such as valuation models etc., which have a direct bearing on the performance of SOEs.

6. Future research recommendations

The paper would be useful to future researchers especially the beginners and early career researchers in terms of its current trends, selection of variables, measurement techniques and statistical tools applied. While much has indeed been learned about privatization as a political and economic policy option, some issues which have either not been covered or discussed in a very limited way in the literature are:

(1) There is a need to examine more closely the sequencing and staging of privatization, and conclusively document whether reforms other than divestment of SOEs can effectively serve as a substitute for privatization as most of the research studies contest that the gain of privatization are at the cost of the society.

(2) There is a larger scope to document the labor economics and human aspects of privatization. The issues such as job security, human resource development including training and career progression, social security and safety net, gender-specific issues relating to child care and maternity need greater deliberation.

(3) The literature presented does not take into account the anti-incumbency of privatization issues related to corporate social responsibility, trade unions, protecting shareholder's rights and organization's preparedness to address these issues.

(4) None of the papers reviewed touch upon the importance of a well-designed communication strategy to address any uninvited resistance of privatization.

(5) No empirical research has been found on establishing the inter-relationship or causality between government's deficit financing and disinvestment. Identifying such relationship or association may help us understand the very intent and forces behind privatization drive.

(6) Attention may be drawn to assess the impact of firm-specific traits/factors on the performance and to separate it from the impact of privatization.

7. Conclusion

Given that economic transitions, corporate governance and performance of SOEs have attracted a great attention from public management and business strategy scholars in recent years, this paper aims to summarize a large number of empirical studies that examine the performance of SOEs. First, the citation analysis reveals *American Economic Review*, *Journal of Financial Economics*, *Review of Financial Studies* and *Journal of Finance* as the top-cited journals, whereas Megginson and Netter (2001), Megginson *et al.*(1994), Djankov and Murrell (2002), Boardman and Vining (1989) and Balsam *et al.*(2003) as the top-cited authors in this particular research field.

Second, the impact analysis shows that the effect of privatization is different across SOEs and economic sectors and therefore, it is case specific. While the effects are positive for some SOEs, it is negative for others as performance is a relative subject and depends upon other factors. Majority research studies have revealed a significant improvement in the financial and operational performance of SOEs in the post-privatization period. However, privatization negatively affects employment of the formerly SOEs as they are overstaffed whose marginal productivity is zero, and the newly privatized entity starts retrenching redundant staff to get maximum return over its investment.

Notes

1. SOEs represent here those enterprises where the state/government holds more than 50 percent of the total equity stake. Though it is known by various names, the term "SOE" is most often used by scholars and practitioners (OECD, 2005; PWC, 2015; Bruton *et al.*, 2015).
2. Privatization means here partial privatization or disinvestment and full privatization with management and control in the hands of private sector.

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(The Appendix follows overleaf.)

Appendix 1

S. No.	Title	Total citations (2011-2016)	Country
1	*American Economic Review*	10,598	USA
2	*Journal of Financial Economics*	6,739	The Netherlands
3	*Review of Financial Studies*	6,185	UK
4	*Journal of Finance*	5,946	UK
5	*Journal of Marketing Research*	5,210	USA
6	*Journal of Political Economy*	5,012	USA
7	*Journal of Economic Literature*	4,642	USA
8	*Journal of Public Economics*	4,100	The Netherlands
9	*Journal of Financial Intermediation*	4,003	USA
10	*Review of Finance*	3,733	UK
11	*Journal of International Management*	3,555	USA
12	*Marketing Science*	3,312	USA
13	*Journal of Public Policy and Marketing*	3,271	USA
14	*Journal of Banking and Finance*	2,954	The Netherlands
15	*Journal of Accounting and Economics*	2,810	The Netherlands
16	*Journal of Economics and Management Strategy*	2,103	UK
17	*Journal of Corporate Finance*	1,794	The Netherlands
18	*European Economic Review*	1,593	The Netherlands
19	*Journal of Empirical Finance*	1,255	The Netherlands
20	*International Review of Economics and Finance*	1,241	USA
21	*Public Budgeting and Finance*	1,192	USA
22	*Economic and Political Weekly*	1,099	India
23	*Asia Pacific Journal of Management*	1,087	USA
24	*Public Choice*	1,050	The Netherlands
25	*International Journal of Accounting*	999	UK
26	*Emerging Markets Review*	957	The Netherlands
27	*European Financial Management*	860	UK
28	*Journal of Corporate Real Estate*	710	UK
29	*Journal of Business Economics and Management*	610	Lithuania
30	*Journal of Asian Economics*	577	The Netherlands
31	*Research in International Business and Finance*	570	USA
32	*Journal of Public Economic Theory*	477	UK
33	*Emerging Markets Finance and Trade*	454	USA
34	*European Journal of Finance*	438	UK
35	*International Journal of Accounting Information Systems*	435	USA
36	*Applied Financial Economics*	426	UK
37	*Journal of Economics and Finance*	379	USA
38	*Journal of International Financial Management and Accounting*	376	UK
39	*Economics of Transition*	362	UK
40	*Journal of Accounting, Auditing and Finance*	340	USA
41	*Journal of Economics and Business*	328	USA
42	*Journal of Economic Issues*	305	USA
43	*Financial Review*	303	USA
44	*Economics of Governance*	289	Germany
45	*Journal of Financial Research*	287	UK
46	*South Asia Research*	287	India
47	*Global Finance Journal*	280	The Netherlands
48	*International Journal of Finance and Economics*	279	UK
49	*IIMB Management Review*	277	India
50	*Asian Review of Accounting*	259	UK

Source: Authors drawn from SCImago Journal Ranking (SJR)

Table AI.
Top-50 highly cited journals

Appendix 2

S. No.	Author/(s)	Journal	Title	Year of publication	Citations
1	Megginson and Netter	*JEL*	From state to market: a survey of empirical studies on privatization	2001	3,468
2	Megginson *et al.*	*JF*	The financial and operating performance of newly privatized firms: an international empirical analysis	1994	1,737
3	Djankov and Murrell	*JEL*	Enterprise restructuring in transition: a quantitative survey	2002	1,356
4	Boardman and Vining	*JLE*	Ownership and performance in competitive environments: a comparison of the performance of private, mixed, and state-owned enterprises	1989	1,320
5	Balsam *et al.*	*AJPT*	Auditor industry specialization and earnings quality	2003	1,094
6	DeWenter and Malatesta	*AER*	State-owned and privately owned firms: an empirical analysis of profitability, leverage, and labor intensity	2001	1,018
7	Boubakri and Cosset	*JF*	The financial and operating performance of newly privatized firms: evidence from developing countries	1998	944
8	D'Souza and Megginson	*JF*	The financial and operating performance of privatized firms during the 1990s	1999	813
9	Gupta	*JF*	Partial privatization and firm performance	2005	502
10	Estrin *et al.*	*JEL*	The effects of privatization and ownership in transition economies	2009	448
11	Aivazian *et al.*	*JCF*	The impact of leverage on firm investment: Canadian evidence	2005	406
12	La Porta and Lopez-de-Silanes	*JF*	Corporate ownership around the world	1999	383
13	Kole and Mulherin	*JLE*	The government as a shareholder: a case from the United States	1997	237
14	Bardhan and Roemer	*JEP*	Market socialism: a case for rejuvenation	1992	217
15	Martin and Parker	*MDE*	Privatization and economic performance throughout the UK business cycle	1995	211
16	Majumdar	*PC*	Capital structure and performance: evidence from a transition economy on an aspect of corporate governance	1998	208
17	Goodman and Loveman	*HBR*	Does privatization serve the public interest?	1991	158
18	Commander *et al.*	*WB*	Enterprise restructuring and economic policy in Russia	1996	133
19	Bevan *et al.*	CERT WP	Determinants of enterprise performance during transition	1999	125

(*continued*)

Table AII.
Top-50 highly cited authors and titles

S. No.	Author/(s)	Journal	Title	Year of publication	Citations
21	Omran	*WD*	The performance of state-owned enterprises and newly privatized firms: does privatization really matter?	2004	118
22	Poister *et al.*	*ARPA*	Strategic management research in the public sector: a review, synthesis, and future directions	2010	104
23	Nagaraj	*EPW*	Public sector performance since 1950 – a fresh look	2006	97
24	Micheli and Kennerley	*JPPCMO*	Performance measurement frameworks in public and non-profit sectors	2007	96
25	Parker	CESIFO WPS	The UK's privatization experiment: the passage of time permits a sober assessment	2004	93
26	Carleton and Lineberry	Wiley	Achieving post-merger success: a stakeholder's guide to cultural due diligence, assessment, and integration	2004	92
27	Astami and Tower	*IJA*	Accounting policy choice and firm characteristics in the Asia-Pacific region: an international empirical test of costly contracting theory	2006	86
28	Omran	*WD*	Privatization, state ownership, and bank performance in Egypt	2007	80
29	Nagaraj	*EPW*	What has happened since 1991 – an assessment of economic reforms	1997	79
30	Earle and Estrin	*WDIWP*	Privatization vs competition: changing enterprise behavior in Russia	1997	78
31	Sathye	*Vikalpa*	Privatization, performance, and efficiency: a study of Indian Banks	2005	78
32	Hassard *et al.*	Routledge	China's state enterprise reforms: from Marx to market	2007	62
33	Bruton *et al.*	*AMP*	State-owned enterprises around the world as hybrid organizations	2015	53
34	Bortolotti and Milella	FEEM Working Paper	Privatization in Western Europe: stylized facts, outcomes, and open issues	2006	52
35	Ozgulbas *et al.*	*BR*	Identifying the effect of firm size on financial performance of SMEs	2006	47
36	Chibber and Majumdar	*EDCC*	State as investor and state as owner: consequences for firm performance in India	1998	44
37	Tian	LBS working paper	State shareholding and corporate performance: a study of a unique Chinese data set	2000	44
38	Jones *et al.*	*PCE*	Choice of ownership structure and firm performance: evidence from Estonia	2007	39
39	Stolt and Winblad	*SCM*	Mechanisms behind privatization: A case study of private growth in Swedish elderly care	2008	39
40	Wolf and Pollitt	JBS working paper	Privatizing national oil companies: assessing the impact on firm performance	2008	25

(*continued*)

Table AII.

S. No.	Author/(s)	Journal	Title	Year of publication	Citations
41	Kuznetsov *et al.*	*EJF*	Performance of closely held firms in Russia: evidence from firm-level data	2008	19
42	Uba	*UU*	Do protests make a difference? The impact of anti-privatization mobilization in India and Peru	2007	19
43	Omran	*JF*	The performance of state-owned enterprises and newly privatized firms: empirical evidence from Egypt	2001	18
44	Astami *et al.*	*ARA*	The effect of privatization on performance of state-owned enterprises in Indonesia	2010	16
45	Cabanda and Ariff	*AEB*	Performance gains through privatization and competition of Asian telecommunications	2002	15
46	Rao and Guha	NDISID working paper	Ownership pattern of the Indian corporate sector: implications for corporate governance	2006	13
47	Kim and Kim	*IJPA*	Appraising the new institutional arrangements for privatization of Korean state-owned enterprises	2001	10
48	Paterson *et al.*	AREU working paper	Putting the cart before the horse? Privatization and economic reform in Afghanistan	2006	9
49	Kousadikar and Singh	*IJASSER*	Advantages and disadvantages of privatization in India	2013	8
50	Semmar	OECD conference paper	Corporate governance of state-owned enterprises in Morocco, evolution and perspectives	2012	8

Notes: *JEL*, *Journal of Economic Literature*; *JF*, *Journal of Finance*; *JLE*, *Journal of Law and Economics*; AJPT, *Auditing: A Journal of Practice & Theory*; *AER*, *American Economic Review*; *JCF*, *Journal of Corporate Finance*; *JEP*, *Journal of Economic Perspectives*; *MDE*, *Managerial and Decision Economics*; PC, *Public Choice*; *HBR*, *Harvard Business Review*; WB, World Bank; CERT WP, Center for Economic Reform and Transformation Working Paper; *WD*, *World Development*; *ARPA*, *American Review of Public Administration*; *EPW*, *Economic and Political Weekly*; *JPPCMO*, *Journal of Production Planning & Control: The Management of Operations*; WDIWP, William Davidson Institute working paper; CESIFO WPS, CESIFO working paper series; *IJA*, *International Journal of Accounting*; *AMP*, *Academy of Management Perspectives*; *BR*, *The Business Review*; *EDCC*, *Economic Development and Cultural Change*; LBS, London Business School; PCE, *Post-Communist Economies*; *SCM*, *Social Science & Medicine*; JBS, Judge Business School; EJF, *The European Journal of Finance*; UU, Uppsala University; *ARA*, *Asian Review of Accounting*; *AEB*, *ASEAN Economic Bulletin*; NDISID, New Delhi Institute for Studies of Industrial Development; *IJPA*, *International Journal of Public Administration*; AREU, Afghanistan Research and Evaluation Unit; *IJASSER*, *International Journal of Advanced System and Social Engineering Research*; OECD, Organization of Economic Co-operation and Development. There are several papers from *International Journal of Public Sector Management* (*IJPSM*), for example, Grossi *et al.* (2015)
Source: Google Scholar (as on March 28, 2017)

Table AII.

Appendix 3. Definition of dependent variables

ROA = Net profit/Average total assets.

ROS = Operating profit/Net sales.

EPS = Net income/Average outstanding common shares.

CR = Current assets/Current liabilities.

DER = Total liabilities/Total shareholder's equity.

ROE = Net income/Shareholder's equity.

ROCE = Net operating profit/Employed capital.

ROCE = Net operating profit/ (Total assets–Current liabilities).

NPM = (Net Income/Net sales)×100.

RG = Total revenue collection.

Liquidity = Liquid/current assets to meet current liabilities.

LTS = Company's ability to meet its long-term obligations which is measured through interest coverage ratio and debt-to-equity ratio.

TFP = It is the effect in growth of total output relative to the growth in inputs of labor and capital. TFP is calculated by dividing output by the weighted average of labor and capital input, with the standard weighting of 0.7 for labor and 0.3 for capital.

OE = It encompasses several strategies and techniques for delivering quality goods to customers in the most cost-effective and timely manner. It is about optimum and productive utilization of an enterprises resources in the most cost-effective and timely manner. It can be captured through inventory turnover ratio, debtor turnover ratio, investments turnover ratio, etc.

Leverage = Ability of the firm to raise debt/loan to finance its assets/working capital.

About the authors

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