

1 **Public Sector Finances as Determinants of Private Investment in PPP Projects in India**

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4 **Abstract**

5 The success of PPP projects depends as much on public sector capacity as on private sector capacity.
6 Governments' ability to bear risks in the form of guarantees or contingent liabilities differs from
7 country to country depending on the degree of innovativeness in the design of these
8 guarantees/contingent liabilities. In order to maintain fiscal health, most governments prefer to issue
9 guarantees that defer any occurrence of cash outflow. Indirect support to the projects in the form of
10 land, clearances or guaranteed revenue or guaranteed rate of return is also, therefore, often resorted to
11 but may require more emphasis particularly in developing countries. Guarantees, once issued, need to
12 be managed well, carefully avoiding any conflict of interest that may creep in. Otherwise too, a well-
13 managed project should require little direct or indirect support. This paper argues that private
14 investment in infrastructure projects is attracted more to states/countries having healthy finances
15 because of the greater confidence in public sector capacity to honour commitments made including
16 guarantees that may have been issued.

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18 **Introduction**

19 PPPs are becoming a highly favoured method of undertaking infrastructure projects and seem to be
20 the only way forward in case of multi-lateral projects. It is said that the success of the one belt-one
21 road initiative is dependent on the capacity of the private sector along with that of the public sector to
22 join in the financing and risk-sharing associated with the project. That capacity, as the paper argues
23 later, may have been enhanced because of the strong finances of the public sector partner – the
24 Chinese government in this case. Since these are long-term projects, the risks in terms of contingent
25 liabilities for both the private and the public sector are also spread out over a fairly long period of
26 time. Investors in these PPP projects will, therefore, need to have a clear picture of the liabilities of
27 the government/public authority throughout the project period. A Discounted Cash Flow analysis of
28 the possible pay-outs under different scenarios would help understand better the feasibility of the
29 project from the viewpoint of both the private and the public sector. Currently, guarantees issued by
30 governments on loans procured by the private partner form a major part of the contingent liabilities.
31 Other than guarantees on loans, contingent liabilities may arise if the government has guaranteed
32 some minimum revenue or rate of return to private developers - a phenomenon that has been prevalent
33 in case of PPP projects. Since this may translate into additional cash outflows from the government
34 kitty, investors in PPP projects would like to be confident about the government's ability to meet
35 these possible cash outflows as they consider this to be a key criterion along with private sector
36 efficiency to determining the success of the PPP project. Proper recording, disclosure and
37 management of guarantees and other contingent liabilities, therefore, become vital to the success of
38 the PPP initiative.

39 This paper looks at guarantees issued in different countries and in different states of India to support
40 PPP projects.

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42 **Types of Sovereign Guarantees**

43 Now, what are the common types of guarantees issued in PPP projects? On alternative forms of
44 guarantees, EPEC Report on State Guarantees in PPPs (2011) lays down different forms such as loan
45 guarantees - accelerator or debt-service type or partial or full; refinancing guarantees and PPP contract
46 provisions such as revenue or usage guarantees; minimum service charge guarantees; change of
47 law/regulation undertakings and termination payment guarantees. Under the acceleratable type, the
48 lenders are entitled to recover full repayment of their debt from the guarantor upon default of
49 payment, while for the Instalment/Debt Service category, the guarantor pays as per original terms of

50 the loan agreement. Revenue guarantees may guarantee a given percentage of revenues with the
51 percentage being larger in the initial years. These are common in the case of toll-roads and such
52 guarantees serve to reduce the traffic risk of the private operator. The Chilean government also issues
53 exchange-rate guarantees; thereby taking away the risk of exchange rate fluctuations in their initial
54 foreign borrowings. Other guarantees may even compensate investors for changes in government
55 policy. Governments usually are under tremendous pressure to issue guarantees but such guarantees
56 should not be given under situations of opaque costing. Often, it is seen that successful projects may
57 lack transparency in costing. That is why, extreme care and caution has to be exercised and a
58 thorough cost-benefit analysis done before issuing guarantees to operators.

59 As per the World Bank report of 2016, conducted by Ruiz-Nunez, Fernanda and Clive Harris on the
60 State of PPPs in Emerging Markets and Developing Economies 1991-2015, payment guarantees
61 comprise 91% of all indirect support provided by governments with revenue guarantees comprising
62 only 7% of total indirect support. In India too, payment guarantees outweigh all other kinds of
63 guarantees. As noted above, a robust guarantee management system begins with designing different
64 types of guarantees.

65 With a range of guarantees now becoming common particularly in emerging economies due to their
66 lower credit rating, the PPP rules and regulations framework nowadays contain provisions such as
67 creation of guarantee redemption fund for the management of such guarantees. The Brazilian law
68 looked up to by many, obliges the public party to guarantee payments to the concessionaire by
69 measures such as i) pledge of revenues; ii) creation or use of special funds; iii) purchase of
70 guarantees from insurance companies that are not under public control; iv) guarantees by
71 international organisations or financial institutions that are not controlled by any government
72 authority; or v) guarantees by guarantor funds or state-owned companies created especially for that
73 purpose. The 2017 court ruling ordering the municipality of Rio das Astros to not withhold payments
74 to the concessionaire even though it was attempting termination of the contract with the financial
75 institution appointed to manage the guarantee fund, was considered to be a landmark ruling towards
76 protection of investor interests. It was, though, later overturned by the Superior Court of Justice in
77 May 2015 on an appeal to that decision on grounds of fiscal ill-health caused by the then political
78 crisis.

79 Nonetheless, it is important that there is clarity on the purpose which the state guarantee is trying to
80 fulfil. European PPP Expertise Centre (EPEC) classifies the drivers of guarantees as follows:

- 81 - Public Sector Policy Drivers: i) Building up confidence in underdeveloped markets; or ii)
82 Accelerating Implementation by unblocking projects; or iii) Safeguarding credibility by
83 protecting the programme;
- 84 - Financial Drivers: i) Leveraging additional finance by improving credit quality enabling
85 more bank lending; ii) Reduction of cost of capital and consequent possibility of additional
86 borrowings and higher discounted value of value for money; iii) Addressing market-wide
87 instability as during the 2008 financial crisis and iv) Tapping new sources of funds.

88 Other than the level of guarantees, issues that may assume importance include the following:

- 89 i) Conflicts of interest arising as a result of issuing guarantees (e.g., in case of a major event
90 of default)
- 91 ii) In case guarantee is invoked, the placing of the government in the list of project lenders
92 and the loss-sharing mechanism (pro rata or first loss).

93 Different countries have different rules on guarantee limits. Rules of some countries have been
94 enumerated below:

- 95 a) UK: In UK, there are individual departmental limits for each department ranging from 6-7
96 per cent of total annual spending.

- 97 b) In Greece, payments of approved PPP projects are capped at 15 per cent of its public
98 investment program.
- 99 c) Brazil: i) Guarantees are limited to 22% of net recurrent revenue (total tax revenue less
100 transfers to other levels of government); ii) Guarantees are subject to a collateral in an amount
101 equal to or higher than the level of guarantee; iii) The entity seeking the guarantee must
102 follow its obligations with the guarantor and with its controlled entities; iv) the Central Bank
103 is prohibited from granting guarantees to the federal government, states or municipalities and
104 v) Guarantees have to be reported every four months.
- 105 d) New South Wales in Australia: i) Guarantees are to be issued only on payment of risk-based
106 fees; ii) All public corporations with total guaranteed debt levels exceeding AU\$10 million
107 have to obtain a credit rating from a treasury-selected rating agency. Other countries that
108 charge risk-based fees are Chile, Colombia, Peru, Sweden and the United States. Higher
109 guarantee fee is chargeable on riskier projects and loans as expected losses increase.
- 110 e) Colombia: i) Guarantees are limited to US\$4.5 billion or equivalent (about 1.6% of GDP) on
111 the stock of guarantees. There is a second limit also of 0.4% of GDP on annual obligations
112 from PPP contracts in the form of called guarantees and annuity payments. In Turkey, there
113 are two annual limits.
- 114 f) India: In India, in 2010, an inter-ministerial taskforce recommended that the sum of total
115 annuity commitments for a particular grant or scheme of any department for the next five
116 years should not exceed 25 per cent of the department's current five-year plan outlay of such
117 grant or scheme. Overall guarantees are limited to 0.5% of GDP, though there are no separate
118 caps for PPP projects

119 The analysis by OECD contained in the Handbook of 2014 of the following countries helps to
120 understand the purposes for which the state guarantee may be required in PPP projects:

Egypt: Barriers to Private Participation in Infrastructure

EGYPT					
Risk categories	Barriers to Private Infrastructure Investment	Frequency (number) (%)		Relevance*	Ability to mitigate*
Political	Political & Civil Disturbance	10	20%	High	Low
	Corruption & Lack of transparency	1	2%		
	Public Perception & Social Opposition	1	2%		
	Change of Law & Breach of Contract	na	na		
Financial	Concessional Funding (lack of private funding)	4	8%	Medium	Medium Low
	Transfer of Funds	na	na		
	Foreign Exchange (inc. devaluation risk)	3	6%		
	Counterparty Risk (lack of sovereign guarantee)	5	10%		
Legal & Institutional	Project Scoping (incl. contract design & risk allocation)	7	14%	Medium	Medium High
	Government Capacity	3	6%		
	Interagency Coordination	4	8%		
	Bidding Process	na	na		
	Legal Framework (incl. permits & licensing)	5	10%		
Operational	Land Availability and Ownership	4	8%	Low	High
	Choice of Location	1	2%		
	Construction Risks	1	2%		
	Social & Environmental Risks	2	4%		

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122 *Source: Public-Private Partnership in the Middle East and North Africa – A Hand Book for*
123 *Policy Makers, OECD, 2014*

124 Clearly, Egypt does not require state guarantees for operational risks and particularly locational and
125 construction risks. The social and environmental risks are also low and ability to mitigate is high.
126 Political risks, on the other hand, are not only high but the ability to mitigate is also low.

Jordan: Barriers to Private Participation in Infrastructure

JORDAN					
Risk categories	Barriers to Private Infrastructure Investment	Frequency (number) (%)		Relevance*	Ability to mitigate*
Political	Political & Civil Disturbance	na	na	Medium High	Low
	Corruption & Lack of transparency	na	na		
	Public Perception & Social Opposition	3	16%		
	Change of Law & Breach of Contract	na	na		
Financial	Concessional Funding (lack of private funding)	2	11%	Medium High	Medium Low
	Transfer of Funds	na	na		
	Foreign Exchange (inc. devaluation risk)	na	na		
	Counterparty Risk (lack of sovereign guarantee)	2	11%		
Legal & Institutional	Project Scoping (incl. contract design & risk allocation)	2	11%	Medium Low	Medium High
	Government Capacity	2	11%		
	Interagency Coordination	na	na		
	Bidding Process	2	11%		
	Legal Framework (incl. permits & licensing)	3	16%		
Operational	Land Availability and Ownership	1	5%	High	High
	Choice of Location	na	na		
	Construction Risks	na	na		
	Social & Environmental Risks	2	11%		

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Source: Public-Private Partnership in the Middle East and North Africa – A Hand Book for Policy Makers, OECD, 2014

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As the table above shows, Jordan's political risks are also high with low ability to mitigate but this relates only to public perception and social opposition as data for other parameters is not available. Financial risks have the potential to pose challenges in both the countries.

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In the case of international projects, guarantees may also be given by Multilateral Development Banks, although their greater emphasis is on trade-related guarantees which form about 50 per cent of the outstanding guarantees in the case of Asian Development Bank (ADB) and Multilateral Investment Guarantee Agency (MIGA), 80 per cent in the case of EBRD (European Bank for Reconstruction and Development) and 100 per cent in the case of African Development Bank (AfDB). Guarantees for infrastructure finance have been usually a small share of resources as they create additional capital adequacy requirements constraining their lending capacity (Pereira Dos Santos, P. and Kearney, M.C., 2018). Besides, guarantees often come at a cost. In Morocco, for example, as per European Investment Bank (EIB) Report of 2011 on Legal & Financial Frameworks, guarantees come at an average cost of about 3.5% of the loan amount which may get priced in by the bidders.

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An alternative to guarantees is direct support by governments in the form of initial or deferred grants or output purchase agreements such as power purchase agreements (PPAs) or water purchase agreements (WPAs). As per the EIB Report of 2011, in Algeria, the credibility of state-owned off takers in PPP projects was enhanced by the formation of joint ventures of these entities with highly rated government entities such as Sonatrach ltd in the oil and gas sector. Once this joint venture was formed, the lenders felt reassured and the government also avoided the need to issue guarantee to the concessionaire. Though highly satisfactory, the joint venture came only after protracted negotiations and significant revision of contractual documentation.

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In India, PPAs are quite common in the energy sector and WPAs are common particularly in the state of Maharashtra, though Karnataka, Madhya Pradesh and Tamil Nadu also have a few such cases. In fact, most of the PPP investment has also come in the energy or power sector. Ideally, of course, the investment in PPP projects should be recovered through user fees or purchase agreements with private entities and wholesale market comprising of a single buyer or a group of buyers at market prices. The study by Ruiz-Nunez, Fernanda and Clive Harris (2016) had also shown that, from 2010 to 2014, 63% of PPP deals had some kind of direct or indirect support by the governments. At times, PPAs/WPAs

159 with private entities are combined with annuity/availability funding from the government, chiefly in
160 the road sector.

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162 Literature Review of Public Role in PPP Projects

163 PPP contracts have received special attention in the literature due to their special characteristics and
164 wide-ranging ramification potential. Istrate & Puentes (2011) had found that states, even in the US,
165 lacked technical capacity to comprehend the complicated PPP contracts and, therefore, recommended
166 establishing dedicated PPP units and promote an outcome-based procurement culture. Wibowo &
167 Kochendoerfer (2010) laid out a methodology under the chance-constrained goal programming
168 framework to maximize benefits and value for money from guaranteed projects. The Jubilee Debt
169 Campaign in UK published a report in February 2017 showing that much of the financial risks in
170 PPPs have been assumed by the public in the medium to long term. The interest rate on PPPs was
171 also found to be almost twice that of the government borrowing rate and the transaction costs in terms
172 of legal and advisory fees averaged 10% of project cost. UK regulations, though, check project
173 compliance with UK National Infrastructure Plan, demonstration of project bankability and risk
174 management and value for money to tax payers before issuing any guarantee (Bilal, 2015). Owolabi,
175 2018 identified and examined 16 accountability mechanisms for guarantees issued by the UK
176 government. Many developing countries, such as Indonesia, have set up guarantee funds to instil
177 confidence in investors for investment in PPPs (Rulliadi, 2014). However, to generate confidence, the
178 guarantee fund must be endowed with a strong asset base not subject to annual budget appropriations
179 (Schur, 2016). Similarly, the minimum revenue guarantee provides a sweetener to the private party
180 but some governments try to reduce the fiscal burden by insisting on reverse deals resulting in sharing
181 of revenues with governments whenever the revenues exceed benchmark levels. The research by
182 Aslan & Duarte, 2014 finds that select countries that have taken the lead in PPP projects have also
183 focused on sound budgeting and accounting practices incorporating fiscal risks of all projects in the
184 medium-term and annual budgets. Credit enhancement through guarantees by Multilateral
185 Development Banks (MDBs) provide further assurance to private investors and also cover any
186 possibility of non-fulfilment of sovereign guarantees, especially in emerging economies (Jett, 2018).
187 Rhee & Hangyong (2007) found that PPPs may actually crowd out public investments both in the
188 short-term and the long-term and that private investment may go up only in the short term. However,
189 Tvarno (2016) shows that quality and efficiency in providing public services may be the driver for
190 PPP projects instead of shortage of public funds. Life cycle costing as an economic tool has been a
191 great enabler pushing firms towards quality parameters. Grilo et al (2005) and Budina Polackova
192 Brix & Irwin (2007) in their study concluded that economic stability, institutional strengths and
193 soundness of legal and regulatory framework are crucial to the success of PPP projects. The study by
194 Babatunde, Perera, Zhou & Udeaja (2016) showed that high contingent liabilities as a factor
195 accounted for 4.09 per cent of the total variance of causes of financial close delays in PPP projects in
196 developing countries. Other critical factors in the study were unstable economic policy and weak
197 financial, technical and managerial capabilities of the concessionaires. Ter-Minassian (2007)
198 concluded that cooperative arrangements and moral suasion across different levels of government
199 could be an add-on to market measures to persuade sub-national governments to be fiscally
200 responsible and promote savings in good times and avoid pro-cyclicality. Lee (2017) found that the
201 annual spending of some provincial governments in Korea had exceeded budgeted figures by a
202 margin of around 1.5% - 2% of total budget. For example, the excess for Gyeonggi-do and
203 Chungnam was 2.5% of total budget and other provinces like Gangjin-gun in Jeonnam, Chilgok-gun
204 in Gyeongbuk, Jecheon-si and Gwangju-si recorded excess spending of 1.75%, 1.64%, 1.61% and
205 1.54% of total budget of the project. The author called for both caution as well as measures to help
206 the local governments. The study by Pereira Dos Santos & Kearney (2018) showed that multilateral
207 development banks (MDBs) have also considered guarantees as a tool for de-risking and crowding-in
208 private investments. Guarantees have accounted for 45 per cent of total private resource mobilization,
209 though 5 per cent of total MDB operations. Kim et al (2011) brought out case studies from Korea
210 highlighting the institutional arrangements and government policies that spurred PPPs in a big way in
211 the country. Nose (2017) showed that government guarantees are more common in cases where PPP

212 contracts are less transparent and bureaucracy is less efficient. The Japanese system of rating
213 municipalities has helped establish a robust competitive culture driving PPPs at the local level.
214 Colombia is also known for a very well-developed fiscal management system with the borrowing
215 limits of subnational governments linked to indicators such as operational savings, liquidity and
216 solvency. This set classifies firms into the 'traffic light system'. Those classified in the 'red light'
217 category will have to seek permission of the Ministry to go for any additional borrowings with a
218 complete ban on funding operating expenses through borrowings and face mandated credit rating
219 before issuance of debt (Salazar, 2013). The study by Adarkwa & Radovic (2016) analysed the
220 relationship between Infrascopes sub-indicators and number of projects. In the study, the financial
221 facility factor was found to be most highly correlated with the total number of projects that reached
222 financial closure between 2011 and 2015. That is why, improving the capacity of insurance and
223 pension funds to invest in capital markets and offering alternative forms of guarantees in contracts
224 boosts investor confidence. When financial facility scores were low, the subnational adjustment
225 factors were also high because of low credit rating of subnational governments.

226 The 2016 World Bank study on Benchmarking Public Private Procurement revealed that 82
227 economies reflect a range of regulatory frameworks and institutional arrangements for PPPs. All have
228 in place specific frameworks for regulating PPPs, with 71 percent either having a concession or a
229 specific PPP law (25 percent of which coexist with a concession law), 11 percent having PPP
230 guidelines or policies, and the remaining 18 percent resorting to the general procurement law to
231 govern their PPP contracts.

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233 Management of PPP Projects

234 Laying down clear selection criteria is the first step towards transparency and good management of
235 PPP projects. In most cases, weights are assigned to both the qualitative factors and the quantitative
236 factors in terms of the economic benefit ushered in by the project. The innovativeness that the bidder
237 will bring in design, construction, financing and/or operations is generally a key component of the
238 qualitative features specified in the tender document. The economic value created by the project
239 bidder through the formation of the PPP as per the concession terms is ordinarily the key quantitative
240 figure to be submitted by the bidder. In fact, in many countries like UK and Australia, it has to be
241 shown that the economic value created through the PPP will be larger than through the traditional
242 government procurement route. In emerging countries, at times, because of inadequate capacity in
243 economic value assessment, PPP contracts have been awarded on the basis of the highest offer of
244 premium payable to the Authority or the least viability gap funding required by the private bidder in
245 case no party quotes a premium.

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247 The Indian Experience in PPPs

248 India has specific PPP regulatory framework and requires clearance from budgetary authority both
249 before tender and before signing the contract. Besides, the tender, PPP award and the contract terms
250 are all available online. In that sense, transparency in India is much higher than even in some
251 developed countries like Australia, Italy and USA. The Indian PPP experience began with premiums
252 paid upfront to the National Highway Authority of India in case of road projects that were awarded
253 from the year 2000. In subsequent years, however, the interest from private developers waned and in
254 2014, just before elections, the UPA government announced that the premium of approximately Rs
255 651 crore payable to the government by the private developers could be spread over the next 12 years.
256 Current rules in India on PPP projects restrict the maximum viability central government subsidy and
257 state government subsidy each to 20% of total project cost. But most governments adopt a multi-
258 criteria analysis for selecting projects that goes beyond financial viability and includes measures such
259 as socio-economic benefits, environmental & resettlement issues, impact on employment & poverty
260 alleviation, contribution to GDP, regional impact, impact on export earnings etc.

261 Indian states vary a great deal in specifying selection criteria of PPP projects. Andhra Pradesh which
262 was the forerunner in PPP projects in the early period of India's PPP experience can be credited with

263 creating robust bid documents. The technical criteria that includes the bidding firm's experience and
264 innovative capacity are given a weight of as much as 80% with only 20% kept for financial
265 parameters. Further, each technical criterion is also given a specific score. Some states like Gujarat
266 openly consider competitive negotiation in addition to competitive bidding, particularly for projects
267 with social significance or those that bring in cutting-edge technology or in cases where there are no
268 other competitive bidders. But experience shows that it may be difficult to assess whether a particular
269 technology is cutting-edge technology or not. Besides, during negotiations, as per PPIAF guidelines,
270 external experts/negotiators must be invited along with the internal project team. Competitive
271 bidding, therefore, is the preferred mechanism for PPP procurement. Bihar, of late, is also powering
272 ahead in PPP projects, particularly focussed on tourism, education & training and healthcare sectors.
273 It may be mentioned here that social and commercial infrastructure projects have accounted for only
274 9% of total PPP investments so far. Karnataka, on the other hand, has received major investments in
275 logistics & transportation including construction of logistics parks, elevated roads, high-speed rail,
276 bus terminals, cruise terminals, passenger amenities centres, vehicle fitness centres, and development
277 of commercial complexes. The toll-operate-transfer (TOT) model currently being experimented in
278 case of national highways has been quite a satisfactory one for the Government of India. In the first
279 phase of bidding, contracts have been received at 1.5 times the bid price. Under this model, the
280 private developers buy the right to collect the toll on existing roads by paying one-time concession fee
281 upfront to the government. A number of foreign companies like Macquarie, Roadis Infrastructure
282 Holding, etc. have won the contracts together with Indian companies such as National Investment and
283 Infrastructure Fund and IRB Infrastructure Ltd. This model is also referred to as the reverse Build-
284 Operate-Transfer (BOT) model and is said to be the answer to India's infrastructure needs.

285 At the global level, the International Public Sector Accounting Standards Board (IPSASB), a unit of
286 the International Federation of Accountants (IFAC), is steering governments to move away from the
287 cash-based system of accounting to accrual-based system of accounting as that would enable
288 disclosure of contingent liabilities on the balance sheet rather than appear as off-balance sheet items
289 that may escape the scrutiny of investors and analysts. This is a very big task for IPSASB and
290 although governments may be convinced about the need to adopt the accrual-based system of
291 accounting, their ability to do the same may be rather inadequate. Based on IPSAS, Europe has
292 developed its own accounting standards for the public sector known as EPSAS (European Public
293 Sector Accounting Standards) and have also attempted at framing budgetary standards. In other
294 regions, for example, South Asia, the move towards public sector accounting standards is a little
295 slower. Although the Government Accounting Standards Advisory Board (GASAB) in India has
296 framed accrual-based standards, they are still to be approved by the government. Hence, the date for
297 adoption of these standards is not known yet. Nepal and Bangladesh, too, are following cash-based
298 accounting standards mainly due to lack of trained staff. Sri Lanka, relatively, is ahead with issuance
299 of 10 Sri Lanka Public Accounting Standards which are equivalent to IPSAS; however, since they are
300 not mandatory, all public sector units are not currently following them. The OECD countries, on the
301 other hand, have made considerable progress in this direction. As of 2017, as per a report of IFAC,
302 nearly three-fourth of the OECD countries have adopted accrual accounting for their year-end
303 financial reports as opposed to a quarter in 2003. The study also points out that while the direct
304 adoption of international accounting standards, such as International Public Sector Accounting
305 Standards (IPSAS) or International Financial Reporting Standards (IFRS), by national governments
306 remains very low, almost 40% of the standard-setters use IPSAS (28%) or IFRS (9%) as primary or
307 explicit references for developing their national standards.

308 Although India has not adopted public sector accounting standards, both Central and state
309 governments are now disclosing guarantees issued by them each year due to the operation of the
310 Fiscal Responsibility and Budget Management Act of 2003. Tables 1 and 2 give snapshots of
311 guarantees issued by the Central Government and state governments respectively:

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Table 1
Central Government Guarantees in India

GUARANTEES GIVEN BY THE GOVERNMENT
Statement under Rule 6 of the FRBM Rules, 2004

ANNEX - 4 (iii)

(As at the end of Reporting Year 2015-16)
(In ₹ crores)

Class	Ministry/ Department	Maximum amount guaranteed during the year	Outstanding at the beginning of the year	Additions during the year	Deletions (other than invoked) during the year		Invoked during the year	Outstanding at the end of the year		Guarantee Commission or Fee	Other material details	
					Discharged	Not dis- charged		Receivable	Received			
1	2	3	4	5	6	7	8	9	10	11	12	
1 Guarantees given to the Reserve Bank of India, other Banks and Financial Institutions (viz., Industrial Finance Corporation of India, Industrial Development Bank of India, Life Insurance Corporation of India, Unit Trust of India, etc.) for repayment of principal and payment of interest, cash credit facility, financing seasonal agricultural operations and for providing working capital in respect of companies, corporations, cooperative societies and cooperative banks.	Ministry of Agriculture Department of Agriculture and Cooperation	2650.00 (2)	2500.00 (1)	150.00 (1)	119.00	...	...	2531.00 (2)	1.50	1.50	...
	Ministry of Finance Department of Economic Affairs	19137.71 (19)	18999.14 (19)	138.57	1884.79 (2)	...	...	17252.92 (17)	71.84	68.02	...
	Ministry of Consumer Affairs, Food and Public Distribution	54495.00 (2)	54495.00 (2)	...	...	...	...	54495.00 (2)	...	...	...
	Ministry of Industry Department of Heavy Industry	449.01 (9)	449.01 (9)	...	84.01	...	...	365.00 (9)	15.49	3.17	...
	Ministry of Micro, Small and Medium Enterprises, Khadi & Village Industries Commission (KVIC)	284.50 (1)	284.50 (1)	...	15.50	...	...	269.00 (1)	71.19	...	...
	Ministry of Chemicals and Fertilizers Department of Chemicals and Petrochemicals	2.55 (1)	2.55 (1)	...	...	...	...	2.55 (1)	0.02	...	...
	Department of Pharmaceuticals	1067.19 (4)	1067.19 (4)	...	...	...	...	1067.19 (4)	70.03	...	...
	TOTAL	78085.96 (38)	77797.39 (37)	288.57 (1)	2103.30 (2)	...	...	75982.66 (36)	230.07	72.69	...
	2 Guarantees given for repayment of share capital, payment of minimum annual dividend and repayment of bonds / loans, debentures issued / raised by statutory corporations and financial institutions.	Ministry of Chemicals and Fertilizers Department of Chemicals and Petrochemicals	250.00 (2)	250.00 (2)	250.00 (2)	2.50
		Ministry of Power	7000.00 (2)	7000.00 (2)	7000.00 (2)	70.00	70.00	...
Ministry of Consumer Affairs, Food and Public Distribution		16195.62 (17)	16195.62 (17)	...	3121.10 (2)	...	...	13074.52 (15)	...	...	...
Ministry of Railways		0.07 (2)	0.07 (2)	...	...	...	...	0.07 (2)	...	...	...
Ministry of Communication and Information Technology Department of Telecommunications		7513.97 (4)	7513.97 (4)	7513.97 (4)	29.80	29.80	...	
TOTAL	30959.66 (27)	30959.66 (27)	...	3121.10 (2)	27838.56 (25)	102.30	99.80	...		

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Receipts Budget, 2017-2018

3	Guarantees given in pursuance of agreements entered into by the Government of India with International Financial Institutions, Foreign lending agencies, Foreign Governments, Contractors, Consultants, etc., towards repayment of principal, payment of interest / commitment charges on loans, etc., by them and payment against agreement for supplies of material and equipment on credit basis to companies, Corporations / Port Trusts, etc.	Ministry of Civil Aviation	36300.30 (28)	31094.57 (24)	5205.73 (4)	36300.30 (28)	98.58	2.70	...
		Ministry of Coal	715.76 (3)	662.68 (3)	53.08	23.36	...	...	692.40 (3)	5.87	5.87	...
		Ministry of Power	32076.69 (39)	29468.00 (39)	2608.69	669.91 (3)	...	...	31406.78 (36)	386.08	386.08	...
		Ministry of Finance Department of Economic Affairs	138026.04 (179)	110747.24 (164)	27278.80 (15)	2388.11 (15)	...	...	135637.93 (164)	147.91	145.59	...
		Ministry of Micro, Small & Medium Enterprises National Small Industries Corporation Limited	60.72 (3)	55.06 (3)	5.66	2.35	...	...	58.37 (3)	0.31	0.22	...
		Ministry of Road Transport and Highways	713.56 (1)	675.95 (1)	37.61	42.76	...	...	670.80 (1)	1.76	1.76	...
		Ministry of New and Renewable Energy	5261.26 (11)	4268.10 (10)	993.16 (1)	241.55	...	...	5019.71 (11)	53.00	53.00	...
		Ministry of Steel	429.77 (2)	393.99 (2)	35.78	11.09	...	...	418.68 (2)	1.03	1.03	...
		Ministry of HUPA	545.27 (2)	504.32 (2)	40.95	60.20	...	...	485.07 (2)	3.98	3.98	...
		Department of Commerce	3.03 (1)	3.03 (1)	...	1.30	...	...	1.73 (1)	0.02	...	...
		Ministry of Urban Development	543.05 (2)	503.71 (2)	39.34	...	...	...	543.05 (2)	6.04	6.04	...
		Ministry of External Affairs	28187.76 (5)	12833.00 (3)	15354.76 (2)	...	...	...	28187.76 (5)	...	...	...
		TOTAL	242863.21 (276)	191209.63 (254)	51653.56 (22)	3440.63 (18)	239422.58 (258)	704.58	606.27	...

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Source: Reserve Bank of India

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As seen in the table, in the case of the first two categories, the highest value of payment guarantees to domestic institutions including statutory corporations and financial institutions have been issued by the Ministry of Consumer Affairs, Food and Public Distribution followed by the Ministry of Finance – Department of Economic Affairs which is also in charge of formulation of guidelines for PPP projects. In the third category of payment guarantees to international financial institutions, foreign lending agencies, foreign governments and foreign consultants, the dominant issuers are the Ministry of Finance – Department of Economic Affairs and the Ministry of Power.

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On state finances, Table 2 gives the value of guarantees issued by different states of India. As can be seen in the Table, Punjab is on a slippery slope with about Rs 658.5 billion of guarantees in 2015-16. Maharashtra, on the other hand, has been able to bring down its guarantees from the high of Rs 594.7 billion in 2005-06 to Rs 82.7 billion in 2014-15. The other notable positive change has been in the case of Madhya Pradesh. Telangana, the new state, has to be a little cautious as guarantees had already reached high levels of Rs 185 billion in 2016-17 over a period of just three years. These figures become important as investors weigh in on their option of selection of the state in which to invest in. This also assumes significance as India does not have a common PPP law; each state has its own unique procedures and regulations to facilitate PPPs. Therefore, foreign investors need to study the fiscal health of multiple states in order to assess whether the governments will be able to honour their guarantees and meet their contingent liabilities if and when invoked. Governments that are weak politically and economically could face challenges in attracting PPP investment. Even governments that are strong may need to create separate funds through budgetary provisions to provide assurance to both domestic and foreign investors.

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Of course, no state needs to make budgetary provision equal to its contingent liability. The model followed may be akin to the expected loss method adopted by bankers. The value-at-risk models or the cash-flow-at-risk models are useful in arriving at the probabilities of different loss levels. What is important, though, is that such exercises are regularly undertaken by states on a dynamic basis and that means that each contingent liability/guarantee is closely monitored. However, there may be occasions when governments do not closely monitor their contingencies, as payments may be made from the Consolidated Fund of India in the case of the Central Government and state consolidated funds in the case of states. This happens when guarantee amounts are relatively small. Specific guarantee redemption funds outside the consolidated funds for large value of guarantees provide

357 higher safety to investors. A Guarantee Redemption Fund (GRF) has been established in the Public
 358 Accounts of India from 1999-2000 for redemption of guarantees given to CPSEs, FIs, etc. by the
 359 Union Government whenever such guarantees are invoked. The fund is fed through budgetary
 360 appropriations with an annual provision in the Budget Estimates (BE), under the head 'Transfer to
 361 Guarantee Redemption Fund' (Grant No. 32 of Department of Economic Affairs). The states,
 362 similarly, have their own Guarantee Redemption Funds through budgetary provisions. The amount in
 363 these funds has to be a function of both the state finances and the probability that the guarantee would
 364 be invoked.

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Table 2

State Government Guarantees in India

State	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (RE)	2016-17 (BE)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Andhra Pradesh	102.4	153.4	153.2	177.1	174.0	174.6	168.7	167.5	152.6	116.4	100.5	151.7	312.4	106.8	106.8	-
2. Assam	18.5	11.0	10.2	6.1	12.2	8.6	-	8.0	3.0	2.5	-	1.1	-	-	-	-
3. Bihar	10.0	7.9	9.0	11.7	5.9	6.2	5.6	-	-	6.4	6.7	10.9	-	20.0	23.0	23.0
4. Chhattisgarh	0.2	2.7	3.0	6.2	14.2	42.0	12.9	17.5	11.2	11.2	22.2	24.7	17.5	16.2	20.1	39.4
5. Goa	-	-	-	-	-	-	5.0	-	-	-	-	-	-	-	-	-
6. Gujarat	187.2	190.0	176.2	156.8	140.8	127.0	115.6	103.4	99.8	88.2	76.2	63.9	-	60.2	160.0	160.0
7. Haryana	86.0	76.8	58.7	42.1	56.3	50.7	27.0	45.8	45.4	45.3	56.0	207.3	273.1	306.2	-	-
8. Himachal Pradesh	41.1	21.5	46.1	43.2	35.5	21.3	25.9	19.6	19.5	28.6	27.6	31.2	-	42.8	-	-
9. Jammu and Kashmir	10.3	10.3	36.3	50.7	-	-	97.1	25.4	30.4	-	-	-	-	28.6	51.6	51.6
10. Jharkhand	-	-	-	-	-	-	-	-	-	-	-	-	1.6	1.6	1.6	1.6
11. Karnataka	118.5	133.1	141.8	174.5	88.8	97.3	103.9	81.8	69.5	66.2	66.4	66.9	77.8	110.3	122.9	-
12. Kerala	119.4	126.2	140.1	123.2	119.4	94.1	83.2	76.0	75.0	74.3	82.8	91.0	97.6	111.3	-	-
13. Madhya Pradesh	96.7	96.7	99.7	94.4	136.9	57.0	-	19.1	-	49.8	50.7	56.1	-	-	2.8	-
14. Maharashtra	355.2	380.0	670.7	588.2	594.7	429.9	360.9	213.0	173.2	150.4	113.1	93.9	77.1	82.7	-	-
15. Manipur	-	-	-	-	2.2	1.9	2.1	2.2	1.9	-	1.8	19.1	-	-	-	-
16. Meghalaya	-	-	-	-	-	-	-	-	-	11.1	-	-	-	-	-	-
17. Mizoram	-	-	-	-	-	1.3	-	1.2	1.0	1.0	-	-	-	-	-	-
18. Nagaland	-	-	-	-	-	-	-	-	-	0.2	0.5	0.7	-	-	-	-
19. Odisha	53.1	55.0	51.8	38.2	35.0	26.5	21.7	13.9	10.3	20.7	25.1	22.5	17.1	16.7	12.9	-
20. Punjab	61.5	186.3	129.9	105.9	92.3	-	110.2	85.0	332.9	-	460.3	624.4	-	-	658.5	-
21. Rajasthan	129.1	148.2	172.4	127.0	131.0	147.1	197.7	277.7	390.7	506.9	607.1	-	-	945.8	-	-
22. Sikkim	-	-	-	-	-	0.8	0.8	-	0.8	-	1.6	1.9	-	1.1	0.9	0.7
23. Tamil Nadu	120.0	119.2	108.2	77.8	63.3	58.5	56.1	54.2	59.6	-	221.2	240.7	495.0	537.0	515.9	-
24. Telangana*	-	-	-	-	-	-	-	-	-	-	-	-	-	168.8	167.9	185.0
25. Tripura	-	-	-	-	0.5	0.4	0.4	0.3	0.3	1.0	1.2	1.9	-	-	-	-
26. Uttar Pradesh	62.7	36.0	83.6	84.3	110.6	127.4	133.6	209.2	172.2	-	294.5	353.9	693.0	744.5	-	-
27. Uttarakhand	-	-	-	-	-	17.4	-	-	15.1	-	17.4	15.7	14.7	18.3	20.3	17.4
28. West Bengal	76.4	103.3	110.4	141.5	135.2	131.4	136.8	120.2	103.9	72.3	77.8	67.2	45.5	93.2	87.4	-
Total	1,648.1	1,855.1	2,198.3	2,042.6	1,948.5	1,621.3	1,665.1	1,540.8	1,768.2	1,252.5	2,313.4	2,146.6	2,122.4	3,412.0	1,952.5	478.8
Per cent of GDP	7.2	7.6	8.0	6.3	5.3	3.8	3.3	2.7	2.7	1.6	2.6	2.2	1.9	2.7	1.4	0.3
Memo item:																
1. NCT Delhi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2. Puducherry	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	0.5	0.6

^: Not available.
 *: Data as on 1st January
 Source: Information received from the state governments.

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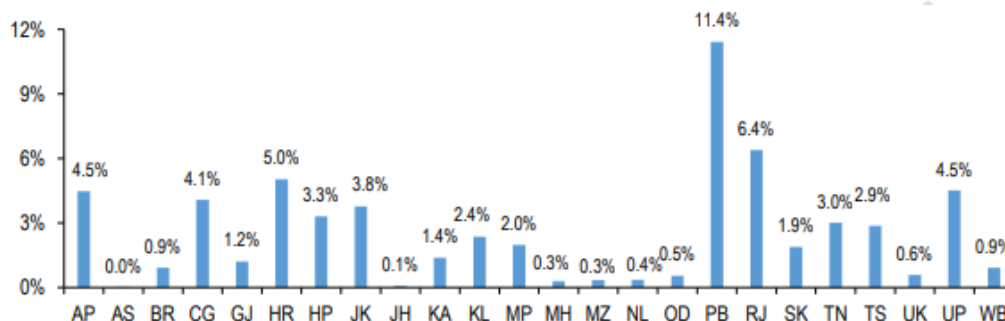
369 Source: Reserve Bank of India

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371 Another depiction of state guarantees as per cent of GDPs is given in Fig 1. Once again, the weak
 372 finances of Punjab and some other states like Rajasthan, Uttar Pradesh, Madhya Pradesh and
 373 Telangana become evident. Figure 2 shows that over the period 2012-13 to 2017-18, Punjab (2.8%),
 374 West Bengal (1.8%) and Kerala (1.6%) has the highest revenue deficits as well. The 14th finance
 375 commission had recommended that states should totally eliminate their revenue deficits. The overall
 376 deficit of these states was also high, crossing the prudent limit of 3%. As this paper argues,
 377 guarantees provided by fiscally weak governments will not be able to support PPP projects either
 378 directly or indirectly. Unless the public sector house is in order, private investment will not flow in.

379

380 **Figure 1: Outstanding Guarantees as per cent of GSDP (2018) – Indian States**



Note: Data not available for Delhi, Goa, and Tripura. Data used for Chhattisgarh, Himachal Pradesh, Kerala, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, and Telangana are for 2016-17. Data used for Jharkhand and Uttar Pradesh are for 2015-16. Data used for Haryana and West Bengal are for 2014-15.

Sources: State Budget Documents; RBI State of State Finances; Central Statistics Office, MOSPI; PRS.

381

382 *Horizontal axis of Fig 1 contains the names of Indian States – Full Names of these states are given in Appendix I*

383

384 The Infrascoppe Index – Measuring Readiness for Sustainability of Projects

385 Management of guarantees is a key input determining the capacity to undertake PPP projects. In fact
 386 with climate change and disaster risk management also becoming important in PPP projects,
 387 management of guarantees is likely to assume a bigger role. The Infrascoppe Index, a tool developed
 388 by the Economic Intelligence Unit (EIU) to measure a country's readiness for sustainable and
 389 efficient PPP projects, could also aid in assessing ability to manage guarantees and other contingent
 390 liabilities. The parameters used by EIU in arriving at country/region scores are similar to those
 391 developed by Public-Private Infrastructure Advisory Financing (PPIAF) of World Bank.

392 The five components included in the Infrascoppe Index are:

- 393 i) Enabling laws and regulations;
- 394 ii) Institutional Framework;
- 395 iii) Operational Maturity;
- 396 iv) Investment and Business Climate; and
- 397 v) Financing Facilities for Infrastructure Projects

398 Under financing facilities, government payment risk and currency risk are key components along with
 399 strength of capital markets and institutional investors and insurance market. These have a direct
 400 impact on the management of guarantees but there are other sub-components of other categories that
 401 can equally impact the government's capacity to honour the guarantees issued. For example, PPP
 402 selection criteria, fairness/openness of bids and contract changes, regulators' risk allocation record,
 403 coordination among government entities and renegotiation rules and procedures under the first

404 category of regulatory framework, can have a tremendous influence on the management of
405 guarantees.

406

407 The full list of sub-indicators used to arrive at Infrascope scores serve as a checklist to a well-
408 managed guarantee system is given in Table 3.

409

Table 3

410

Infrascope Categories and Indicators

1) Regulations
1.1.) Conducive regulatory environment
1.2.) PPP selection criteria
1.3.) Fairness/openness of bids and contract changes
1.4.) Conciliation schemes
1.5.) Regulators' risk-allocation record
1.6.) Co-ordination among government entities
1.7.) Renegotiations
1.8.) Sustainability
2) Institutions
2.1.) PPP institutional framework
2.2.) Stability of PPP dedicated agency
2.3.) Project preparation facilities
2.4.) Transparency and accountability
3) Maturity
3.1.) Experience with infrastructure PPP contracts
3.2.) Expropriation risk
3.3.) Contract termination
4) Investment and business climate
4.1.) Political effectiveness
4.2.) Business environment
4.3.) Political will
4.4.) Competition environment in the local industry
5) Financing
5.1.) Government payment risk
5.2.) Capital market for private infrastructure finance
5.3.) Institutional investors and insurance market
5.4.) Currency risk

411

412 *Source: Evaluating the environment for public-private partnerships in Eastern Europe, Central Asia*
413 *and the Southern and Eastern Mediterranean, Economic Intelligence Unit, 2017*

414 The Infrascope Index has been used to rank countries of different regions. Certainly, the top-rated
415 countries would have higher capacity in meeting their guarantee obligations due to both strong
416 institutions and strong finances. Some of the rankings of 2017 are as shown below in Table 4:

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
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Table 4
Infrascope Rankings

Average global score = **56**
Scoring is 0 to 100, where 100 is best

		Overall	Regulations	Institutions	Maturity	Investment & Business Climate	Financing
	Albania	48	55	53	33	74	34
	Argentina	43	60	42	28	48	43
	Belarus	46	55	53	56	39	23
	Benin	60	81	61	60	66	31
	Brazil	70	73	88	68	51	73
	Bulgaria	45	51	8	51	65	48
	Burkina Faso	54	55	55	52	71	37
426	Chile	75	91	68	81	72	62
	Colombia	76	91	75	82	68	63
	Costa Rica	59	53	40	70	75	54
	Dominican Republic	49	68	16	49	60	32
	Ecuador	40	68	31	19	54	40
	Egypt	55	55	68	61	51	38
427	El Salvador	61	90	91	49	45	38
	Georgia	41	36	1	62	62	35
	Guatemala	57	80	80	51	45	33
	Honduras	66	76	63	82	65	38
	Jamaica	69	80	75	80	74	34
	Jordan	63	49	78	72	59	53
	Kazakhstan	59	54	88	60	62	28
	Kosovo	64	61	76	71	61	49
428	Malawi	41	48	61	43	39	14

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 Morocco	58	51	40	78	61	53
 Nicaragua	59	78	66	67	39	40
 Panama	49	47	11	67	59	54
 Paraguay	58	71	60	56	66	37
 Peru	73	71	66	81	66	77
 Romania	49	29	33	68	72	34
 Senegal	67	72	61	83	67	45
 Serbia	61	67	38	66	77	53
 Slovakia	64	85	56	63	71	47
 Sri Lanka	52	57	44	59	56	44
 Timor-Leste	58	78	80	56	54	22
 Togo	35	28	1	56	49	31
 Trinidad and Tobago	52	49	48	60	62	38
 Turkey	61	50	53	83	53	57
 Ukraine	50	47	43	63	52	37
 Uruguay	65	61	63	71	67	58
 Venezuela	9	13	0	10	12	8

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431

432 *Source: Evaluating the environment for public-private partnerships in Eastern Europe, Central Asia*
 433 *and the Southern and Eastern Mediterranean, Economic Intelligence Unit, 2017*

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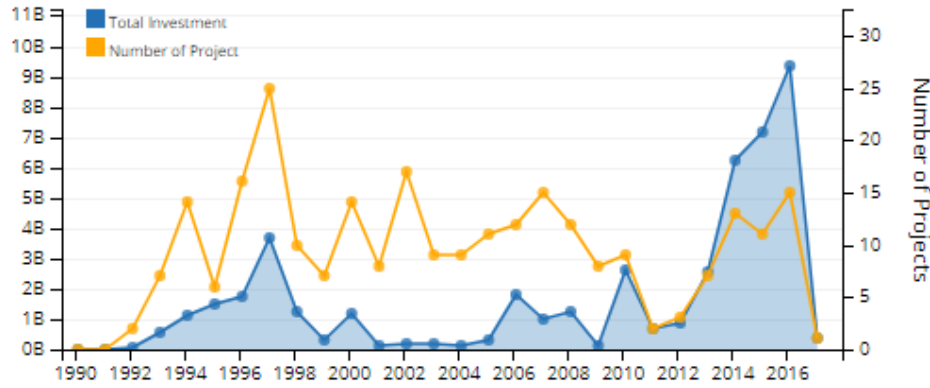
435 As seen from the above table, Colombia, Chile and Peru have been the highest-ranked countries with
 436 overall infrascopes scores of 76, 75 and 73 respectively. In all these countries, the rules and
 437 regulations framework has been very strong and their long PPP experience is also a big advantage.
 438 However, there is scope for improvement in investment & business climate as well as financial
 439 matters. Colombia and Chile, with finance category scores of 59 and 62 respectively are still low on
 440 sovereign guarantee partly because of inadequate guarantee fund and high currency risks. That is
 441 why, both the countries have not been ranked as mature on these two parameters. Peru, on the other
 442 hand, has done far better with the finance category score of 77, but has to do more work on setting up
 443 robust institutions and improving its investment climate. Further improvement in these scores depends
 444 on the ability to address these challenges of implementing PPP projects including ability to resolve
 445 conflicts speedily. The ranking of states or sub-national governments based on their Infrascopes scores,
 446 thus, provides easy guidance to investors on locational suitability for investment. That is why, some
 447 municipalities have also quite enthusiastically employed Infrascopes scores. Beyond these scores,
 448 however, the size of the country may also matter in determining the level of PPP investment. As the
 449 graphs below show, Brazil, with almost equivalent scores as Colombia and Peru, attracts PPP
 450 investment which is about 10 times larger than that of Colombia or Peru. India, too, had received a
 451 high overall score of 70.3 in 2014 largely due to its robust set of rules and regulations. Gujarat, at that
 452 time had received a score of 68 based largely on the same strengths. But infrascopes scores for other
 453 Indian states have not been published by the EIU. It would be useful for a domestic institution to
 454 develop a similar index for all states in India as they will be a good guide to both domestic and
 455 foreign investors intending to form partnership with local governments.

456

457 **Infrascope 2017 Statistics**

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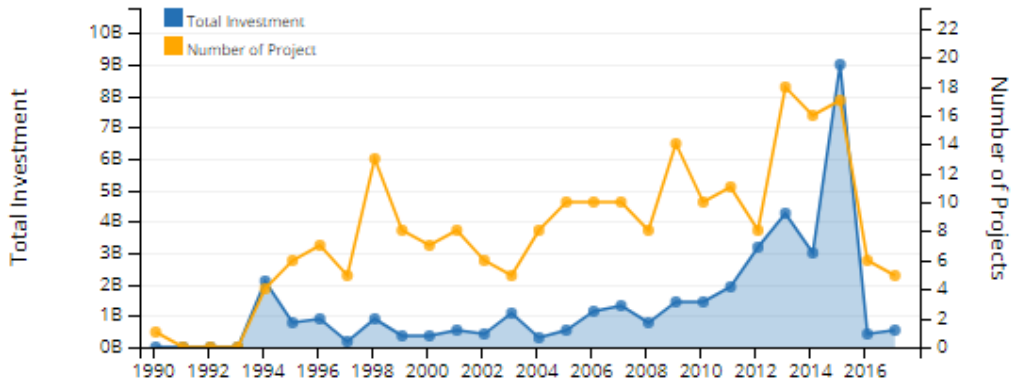
459 **Colombia**



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462 **Peru**

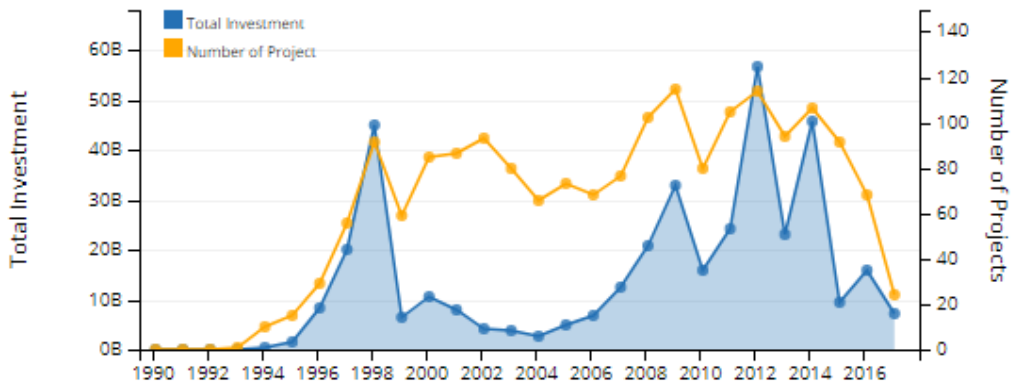


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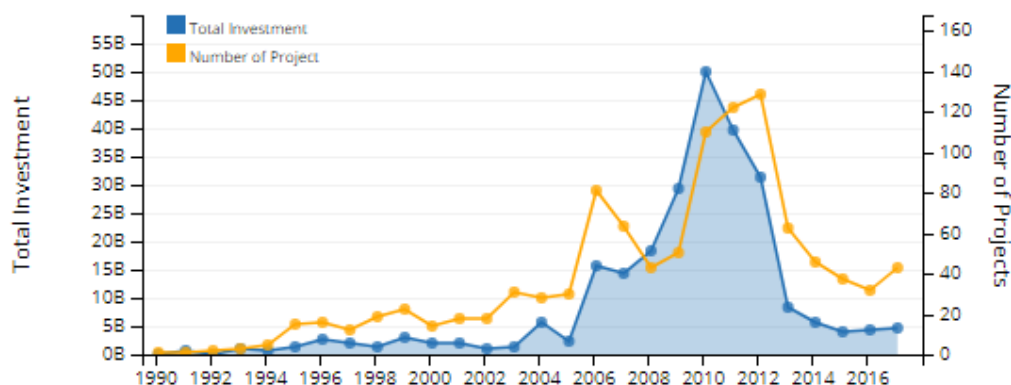
466 **Brazil**



467

468

469 **India**



470

471 *Source: PPI World Bank Database*

472

473 Ruiz-Nunez, Fernanda and Clive Harris (2016) had also shown that the top five countries in terms of
474 total PPP investment commitments from 1991-2015 were Brazil, China, India, Mexico and Turkey.
475 The financial and economic crisis of 2001-2002 prevented investments from coming into Argentina
476 despite having the fifth highest overall investment commitments and that is why Turkey replaced
477 Argentina in the top five countries.

478 There is no doubt that governments, too, need assistance in both the design and implementation of
479 PPP projects. Infrastructure UK (IUK) which replaced Partnership UK (PUK) in 2010 and helped the
480 government in its various activities relating to PPP projects was later merged with the Major Ports
481 Authority to form a new organisation by the name of the Infrastructure and Projects Authority (IPA)
482 that looked after both the assessment and financing of projects. IPA is closely involved with the
483 public sector entity in the commencement and closure of project deals. The technical assistance given
484 to local governments cover all the stages of a PPP project from development, structuring and
485 procurement to execution and delivery. In USA, many states have their own PPP public agency like a
486 government department or a commission/advisory board mainly in the transportation sector. In some
487 other countries, transaction advisors are appointed as and when necessary. In India, Infrastructure
488 Leasing and Financial Services (IL&FS), Infrastructure Development Finance Company (IDFC),
489 International Finance Corporation (IFC), Price Waterhouse Coopers (PwC), Grant Thornton Ltd,
490 Ernst & Young (E&Y) etc. are the more well-known transaction advisors. A robust institutional set-
491 up, though, is common in countries scoring high on the financial parameter.

492 The IMF, in collaboration with the World Bank, has developed the PPP Fiscal Risk Assessment
493 Model (PFRAM), an analytical tool that quantifies the macro-fiscal impact of PPP projects. Used by
494 ministries of finance, the tool provides a structured process for gathering information for a PPP
495 project in a simple, user-friendly, excel-based platform. It can be used to evaluate an existing project
496 at different stages of its project cycle as well as to evaluate potential projects.

497

498 Conclusions

499 India has done reasonably well crafting PPP laws and regulations and building institutions that
500 support the smooth implementation of these laws and regulations. India has also been able to honour
501 guarantees and meet other contingent liabilities issued to domestic and foreign investors; thereby,
502 showing fiscal prudence despite the large value of PPP projects being undertaken in the country.
503 Individual states, though, may not be as well placed. Newer states such as Telangana, have already
504 run up high values of guarantees, most of which are payment guarantees. Governments which are

505 able to carve out alternatives to issuance of guarantees such as offtake agreements and/or issue
506 guarantees that do not involve outflow of funds, are stronger fiscally which, in turn, help to draw in
507 larger investments. Besides, guarantees are an additional expense to the private partner, especially
508 when a pass-through to consumers is not feasible. Among other factors that determine PPP-
509 friendliness, one of the crucial factors is fiscal health of the public authority. Currently, the term
510 'Viability Gap funding' is largely understood only from the private sector angle as it seeks
511 government finances to compensate itself against inadequate benefits from the project. The
512 government or the public authority must similarly assess the maximum possible viability gap funding
513 from its side given the expected value of the assets that would be transferred to it at the end of the
514 concession period and the immediate transfers from it to the private party in the form of land, tolling
515 rights etc. and the value of the contingent liabilities it is assuming. Merely awarding contracts on the
516 basis of the least request for viability gap funding may not be appropriate as even this least amount
517 may be more than the viable gap funding amount from the viewpoint of the government or the public
518 sector authority.

519 A proper assessment of the type of guarantee needed and the time period at which it is to be given to
520 address a given risk has been seen to be critical in many PPP projects. That is why, countries or states
521 with equally robust legal framework and strong institutions may still differ in their ability to attract
522 PPP investments.

523

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UNDER PEER REVIEW

649 **Appendix I – Indian States**

650

651 AP - Andhra Pradesh

652 AS - Assam

653 BR - Bihar

654 CG - Chhattisgarh

655 GJ - Gujarat

656 HR - Haryana

657 HP - Himachal Pradesh

658 JH - Jharkhand

659 JK - Jammu & Kashmir

660 KA - Karnataka

661 KL - Kerala

662 MH - Maharashtra

663 MP - Madhya Pradesh

664 MZ - Mizoram

665 NL - Nagaland

666 OD - Odisha

667 PB - Punjab

668 RJ - Rajasthan

669 SK - Sikkim

670 TN - Tamil Nadu

671 TS - Telangana

672 UK - Uttarakhand

673 UP - Uttar Pradesh

674 WB - West Bengal

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676 Source: Ministry of Statistics and Programme Implementation

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