

## 5. Investment models

### Investment models

#### 1. Merits of capitalism

1. **Automatic working** as it does not require any central directing authority.
2. **Higher rate of capital formation** and thus greater economic development and prosperity.
3. **Optimum utilisation of resources**. Thus it also leads to **higher efficiency** and incentive to hard work.
4. **Just and democratic**.
5. **Encouragement to enterprise and risk taking** adaptability.

#### 2. Demerits of capitalism

1. Emergence of **monopolies** and **concentration of economic power** in hands of few individuals. This leads to social injustice and economic inequality.
2. **Malpractices such as corruption** arise due to nexus between politicians and bureaucrats.

#### 3. Planning model adopted during initial years

1. **Raising the rate of investment** since the rate of development is dependent on the rate of investment. It involved stepping up domestic and foreign savings too.
2. **Rapid growth of the productive capacity** of the economy by directing public investment toward development of industries. Simultaneously, promotion of labour-intensive small and cottage industries.
3. **Import substitution for self reliance**.
4. An elaborate system of controls and **industrial licensing**.
5. Predominance of public sector in **capital goods** industries.

#### 4. Relevance of planning in India

1. Though **Planning** has been one of the **basic pillars of the Indian state's** approach to development since independence, however in recent times the relevance of planning is much debated. One argument is that **planning has failed to achieve its goals**. The second argument is that planning has become irrelevant owing to globalization and liberalisation.
2. However, planning based on the Mahalanobis framework was fine

during the first three plans. The **problems that surfaced later** were not due to planning but are the product of **lack of appropriate planning** and mismanagement by the government.

3. **Planning does not become irrelevant** due to internationalisation of capital. In a liberalised economy, the **nature of planning changes** corresponding to the changes. Public investment will continue to have a **major role in social sectors** and rural economic infrastructure and the prioritization of the investment has to be properly planned.
  4. The role of planning in our federal system is **to coordinate the activities** of all **levels in the government** and that of the **market and civil society** actors. In this way, it has to evolve a shared **commitment to national goals** among all actors in the society. Further the inherent exclusionary tendencies of the market can only be limited by the State through proper planning.
  5. To make **planning successful**, the country has to follow a **more decentralised and participatory planning**. To remove regional disparities there is need for regional planning, town and country planning. It also needs to be made **contemporary** and **comprehensive** by including not only the conventional issues but also the emerging areas, like critical **environmental issues**.
5. **Issues in infrastructural financing**
1. **Poor funding:** The **slowdown in the economy** has further **aggravated** funding capacity in the infrastructure sector. More recently, in the context of **Eurozone debt crisis**, accessing **external resources** by way of ECBs could also become difficult and this would also accentuate the funding gap.
  2. **Fiscal burden:** Almost **half of the total investment** in the infrastructure sector was done by the Government through **budget allocations**. Here the point to be noted is that Government funds have competing demands, such as, education, health, employment generation, among others.
  3. **NPA:** Due to **NPA crisis**, commercial banks are not forthcoming to lend to long term infrastructure needs. Also these banks rely on **short-term liabilities** and, as such, their ability to **extend long term loans** to the infrastructure sector is **limited**. This is because, by doing so they get into serious asset-liability mismatches.
  4. **Insurance and Pension funds:** **Insurance and pension funds** are

one of the best suited to invest in the infrastructure sector because of their long term nature. However, they are constrained by their obligation to invest a substantial portion of their funds in Government securities.

5. **Insufficiency of user charges:** Large part of the infrastructure sector in India is not amenable to commercialisation. Due to this, Government is not in a position to levy sufficient user charges on these services. The insufficiency of user charges on infrastructure projects negatively affect the servicing of the infrastructure loans.
  6. **Legal and procedural issues:** The problems related to infrastructure development range from those relating to land acquisition for the infrastructure project to environmental clearances for the project. Many a times there are legal issues involved in it and these increase procedural delays.
  7. **Vibrant corporate bond market:** An active corporate bond market can facilitate long term funding for the infrastructure sector. However, despite the various initiatives taken by the Reserve Bank, SEBI and Government of India, the corporate bond market is still a long way to go in providing adequate financing to the infrastructure sector in India.
  8. **Developing municipal bond market:** Conventional fiscal transfers to the urban local bodies are no longer sufficient. One possible way of addressing the problem is developing a municipal bond market.
6. **Measures taken by Government**
1. **PPP in Infrastructure:** As Government faces a tight budget constraint, it started encouraging PPP projects in the infrastructure. Government has taken several initiatives, especially to standardise the documents and process for structuring and award of PPP projects. This has improved transparency.
  2. **Setting up of IIFCL:** Central Government setup IIFCL for providing long term loans to the infrastructure projects. IIFCL is involved both in direct lending to project companies and refinancing of banks and other financial institutions.
  3. **FDI:** To facilitate infrastructure financing 100 percent FDI is allowed under the automatic route in some of the sectors such as mining, power, civil aviation sector, telecommunications, special

economic zones, etc.

4. **Use of foreign exchange reserves:** Although use of reserves for such purposes does not meet the criterion of **reserve management** objectives, a **special and limited window has been created**.
5. **Liberalisation of ECB policies:** **Corporates implementing** infrastructure projects were eligible to avail ECB upto USD 500 million in a financial year under the automatic route. This limit has been **raised to USD 750 million**.

## EPC and PPP

### 1. EPC model

1. **EPC** stands for **engineering, procurement and construction**. In this model the project is awarded to the private players through a bidding process. Unlike the BOT model, **Government funds** the entire project under EPC and a developer undertakes the necessary construction work. In many instances, the **Government becomes the firm's only customer** and promises to purchase at least a predetermined amount of the project's output.

### 2. Why EPC is preferred over PPP (BOT)

1. **Lack of financial viability**, delay in **project clearances** and approval and the slowdown in the economy has prevented private players from taking up large infrastructure projects on a PPP basis.
2. The **possibility of unnecessary litigations** has also **discouraged** the **private sector** to enter into PPP contracts with the government.
3. Whereas in the EPC mode **entire investment is made by the government** and a private player is the contractor for construction.
4. Further **EPC promises guaranteed prices**, timeline for the completion, **single point of responsibility** and higher control.

### 3. Problems in PPP

1. The present **contracts consider only fiscal returns without incentivising the efficient service**. In this case the **contractor simply charges the user more to pay** the government but does not bother to look for efficient delivery of service.
2. In the absence of any other credit mechanism, **Government provides the bidder viability grant** to meet the immediate

requirements. But in case of non-performance of these projects, **Government has no leverage to recover the costs incurred.**

3. **Unjustified risk allocation to unmanageable entities.** For example, in case of highways, ports and railways the **traffic demand** is not in the control of operators but risks associated with low traffic are imposed on these operators.
4. There are no structures available for **renegotiation**. **Any attempt by bureaucrats for renegotiation** are doubted as cases of **corruption** whereas stalled projects did not subject to any scrutiny. Hence they prefer inaction.
5. Contracts are **unable to enforce market discipline** and discourage **reckless bidding**. Hence, bidders don't bother to **index their bids properly** with respect to fluctuations such as oil prices and other raw material costs.
6. **Not all projects are feasible** because of political reasons, legal reasons, commercial viability, etc.
7. The **private sector may not take interest** in a project due to perceived **high risks** or may **lack technical, financial or managerial capacity** to implement the project.
8. A **PPP project may be more costly** unless additional costs (due to higher transaction and financing costs) can be offset through **efficiency gains**.
9. **Change in operation and management** control of an infrastructure asset through a **PPP may not be sufficient to improve** its economic performance unless other necessary conditions are met. **These conditions may include appropriate** sector and market reform, and change in operational and management practices of infrastructure operation.

#### 4. **Kelkar committee proposed reforms**

1. **Governance, Institutions and Capacity**, enumerated as the **3 pillars of the PPP framework**, were essential for institutional capacity building activities, hence should be vitalised.
2. **Government may develop a PPP law** with endorsement from Parliament. It gives an authoritative framework to implementing executives.
3. For **evaluating stressed PPP projects** in a time bound manner, **Infrastructure PPP Project Review Committee (IPRC)** is

proposed.

4. **Swiss Challenge method of awarding contracts should be avoided** to discourage unsolicited proposals.
5. The “One-size-fits-all” approach should be avoided and **project specific risk assessment** should be **undertaken**.
6. The **Prevention of Corruption Act, 1988** should be amended at the earliest to punish corrupt practices while saving those who made genuine mistakes in decision making.

#### 5. **Other reforms**

1. **Allocate development and maintenance** to the same player to avoid the problems of poor quality of project.
2. **Financing structures** should be able to **attract pension and insurance funds**, which are a natural funding source for long term infrastructure projects.
3. **Risk should be transferred to only who can manage**. For example, in case of telecom projects and individual port terminals demand can be controlled via tariff and quality of service but in case of **highway projects**, demand risk cannot be on the shoulders of operator.
4. **Renegotiation commission** need to be established for revival of stalled projects and also to offer the easy exit for players suffer from insolvency.

#### 6. **3P India**

1. Government is in the **process of setting up 3P India** with a **corpus of Rs. 500 crore** to provide support to mainstreaming PPPs and to enable focussed attention on accelerating the delivery of efficient PPPs.
2. It is suggested that the **task for restructuring of the PPP** contracts may be **entrusted to this body** that may house specialized skills in the area.
3. The institution may have **experts** from a wide background including **industry, financial institutions, lenders**, etc. with the requisite skill sets.
4. It may **also evolve PPP models** to enable **attracting private** investments in sectors like **Railways, airports** and also social sectors.
5. This entity **could also assist project promoters** in identification,

structuring and hand holding for a designated fee.

## Hybrid annuity model (HAM)

1. The **Hybrid Annuity Model (HAM)** is a **mix** of Engineering Procurement Construction (EPC) and Build Operate and Transfer (BOT) formats, with the government and the private enterprise sharing the total project cost in the ratio of **40:60**, respectively. **Government releases 40% of total project cost**, in **five tranches** that are linked to milestones. Balance 60% is arranged by developer – who usually **invests  $\leq 20\text{-}25\%$  of project cost** and raises the remaining amount as debt.
2. **Some salient features of HAM**
  1. The **government would partially fund the contractors (40%)**.
  2. The **maintenance** of the project will be **carried out by the government** and a **fixed annuity** would be provided to the contractors.
  3. Necessary **land acquisition** and **environmental clearances** would be **handed over to private contractors** prior to the commencement of project.
  4. The model would prevent instances of **viability gap funding (VGF)** given to contractors under BOT and hence increase their accountability.
4. **How HAM is an improvement over EPC**
  1. In HAM, **the government would partially fund the project**, as compared to complete funding under EPC model. Therefore reducing the burden on the exchequer.
  2. It **spreads the risk between developers and government**. Also, the government provides **viability-gap funding (VGF)**.
  3. Moreover **all regulatory clearances risk**, compensation risk, **commercial risk** and **traffic risk is borne by government**, so risk for private sector is also minimal.
  4. Here the government would shoulder the **responsibility of revenue collection** and **refund the amount in instalments** over a period of 10 years in 20 equated instalments.

## 5. Challenges

1. HAM is still a **new model**. So government should test it, **improve it and refine it**, before it goes big.
2. **Participation has to be increased** more to start the **positive feedback** loop, where old contractors return. Then more participation and competition will increase the confidence.
3. In HAM **only part of the funding problems** (40%) are **de-risked**.
4. **Over indebtedness of corporate sector** along with uncertain global economic conditions makes corporate sector participation timid.
5. These long term projects need **long term saving sources** such as **pension** and life-insurance funds. The reforms in this sector have to be speeded up.