Prospects and Challenges for Rural Economic Development

Sub theme : Employment, inequality and rural poverty

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"Are Public Sector Wage Hikes Good for the Public? Examining Its Role in Accentuation of Inequality and Perpetuation of Poverty"

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In this working paper, we investigate the implications of a recent Government policy of raising public sector wages, especially on the inequality and poverty situation of the rural economy. The argument that has been put forward for this public sector salary hike is to compete and be at par with the salaries offered by the private sector. One of the rationale put forward by our Government is that by the appreciation of wages in the private sector, the wage gap between the private and public sector will be lowered and hence income inequality in the economy will be reduced. However, in our model we will show that, on the contrary, the attempt to bring down the persistent wage gap between the two sectors actually raises inequality further. Large sections of the masses, especially in the rural areas, are pushed further below the poverty line, accentuating the already existing significant inequality and intensifying poverty. We are attempting to explore our idea through the formulation of a two-period model which has two cases, the first being the Government's vision and in the second we try to examine the real situation that prevails in our country. Then, we attempt to describe this situation in terms of a possible political economic situation that might be prevailing in reality.

Key-words : Inequality, poverty, organised sector, unorganised sector and rural economy, political economy.

In India, agriculture has formed the crux of our national economy for centuries now. Even today, amidst the recent boom of the industrial sector, agriculture and allied activities continue to hold the key position, employing around 235 million people out of a labour force of 397 million, that is, around 59% of the national labour force. Thus, we are rightly referred to as an agrarian economy internationally. And, following one of the basic characteristics of an agrarian economy, most of our labour force, about 86%, is employed in the unorganised sector.

But, in spite of the fact that the unorganised sector employs the largest chunk of our labour force, this sector has almost persistently been neglected by our Government. Wages in the organised sector, that employs only about 14% of the total labour force, have risen gradually over time. But, wages in the unorganised sector have virtually remained at the same position.

In recent times, the corporate sector has been handing out very high wages. It has been projected that, in 2011, this sector will give out ` 3.5 lakhs and above per annum as salaries to its freshly-hired employees. Thus, it can be expected that the salaries of senior employees will be higher than this figure. Following this, the Government recommended the setting up of the Sixth Pay Commission in July 2006 to revise and upgrade the wages of employees in the public sector. One of the rationale that the Government set forward was to compete and be at par

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with the salaries offered by the private sector so that the wage differential between the private and public sector would be lowered and hence income inequality in the economy would be reduced.

The Pay Commission submitted its report in early 2008, where it recommended a wage rise by about 160% of all public sector employees (Table 1). Further, it recommended that this salary scale be implemented in retrospective effect, through January 2006 to September 2008, as well. As a result, the wage differential between the public and private sectors has fallen to a large extent. But, the unorganised sector was outside the purview of the Pay Commission. So, the wages in this sector has remained at pretty much the same subsistence level (Tables 2 & 3). Thus, inequality between the organised and unorganised sectors has suddenly risen greatly. As a result, the people employed in the unorganised sector have been made even more vulnerable to poverty. And, since most of the unorganised sector is located in the rural areas, our rural economy has suffered the most following this hike in public sector wages.

It may be argued that this hike in wages cause the GDP to rise, and this, in turn helps the growth performance of the economy. But, of late, economists have shown that overall growth does not necessarily translate into economic development. Thus, the idea of inclusive growth has emerged. Also, it may be argued, following the idea put forward by Rawls in his "Theory of Justice", that existence of inequality may act as an incentive for people to acquire more skills. But, this may not hold true for a nation where eight states, namely, Bihar, Chattisgarh, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh, and West Bengal, have more number of poor than the 26 poorest African countries combined. People whose basic needs are not fulfilled generally do not think about acquisition of skills.

In this paper, we are attempting to formally proof the assertion that the recent hike in public sector wages actually ends up accentuating inequality and perpetuating poverty in our country. In Section II we set up the two period model, analyzing two cases. In Section III we try to examine the reason behind the Government's recent behaviour through a political economy model. Finally, in Section IV we put forward certain policy implications, that may help this situation.

SECTION II : THE MODEL

In this two-period model, we consider two cases. In case one, we focus on our interpretation of the Government's vision. In case two, we put forward our perception of the reality.

Case I : Government's Vision

Assumptions :

1. **The economy is a fully urban economy. There is no rural sector in this economy.**
2. **There are only 2 sectors in the economy : private and public sectors. Sector 1 is private sector and sector 2 is public sector. There is no unorganised sector.**
3. **Total labour force = 2N**
   No. of workers employed in private sector = n_1
   No. of workers employed in public sector = n_2
4. **Equal no. of people are employed in the two sectors. That is, $n_1 = n_2 = N$.**
5. **There is full employment in this economy.**
6. **Wages in private sector = w_1, and, wages in public sector = w_2, initially.**
7. **This is a static economy, i.e., there is no growth of the labour force across the two periods.**

Period 1 :

Total income in the private sector = $w_1n_1 = w_1N$.

Total income in the public sector = $w_2n_2 = w_2N$.

Here, $w_1 >> w_2$, as was the case before the salary hike following the Sixth Pay Commission.

And, as $n_1 = n_2$, $w_1n_1 >> w_2n_2$

Thus there exists a large income inequality among the two sectors.

Now, purchasing power in the private sector = w_1n_1/P_1

And, purchasing power in public sector = w_2n_2/P_1

Let,

$P_1 = a_1 - b_1q_1$ --- Demand curve for private sector
q_1 = Private sector's demand. $a_1, b_1 > 0$

$P_1 = a_2 - b_2q_2$ ---- Demand curve for public sector
q_2 = Public sector's demand. $a_2, b_2 > 0$

Therefore, $q_1 + q_2 = Q$ ---- Joint demand of the two sectors.

Before the wage hike in public sector, demand elasticity of public sector is more than the demand elasticity of private sector, because their

wages are low and thus they will respond more than their private sector counterparts to a certain rise in price.

Thus, demand curve for private sector is steeper than public sector's demand curve.
Thus we have, $b_1 > b_2$.

Let $P_1 = c + dQ$ be the economy's market supply curve. $c, d > 0$

After horizontal summation of each sector's demand curve, we get the market demand curve as :

$$P_1 = a - bQ, \quad a, b > 0$$
$$\text{where, } Q = q_1 + q_2$$

At equilibrium,

$$a - bQ = c + dQ$$
$$\Rightarrow Q^* = (a - c)/(b + d)$$ **----- This is the equilibrium quantity.**

$$P_1^* = (ad - bc)/(b + d)$$ **----- This is the equilibrium price.**

Deriving the demands of the two sectors individually, we get,

$$q_1^* = (a_1 - c - dq_2)/(b_1 + d)$$

This is the demand of private sector.

Similarly $q_2^* = (a_2 - c - dq_1)/(b_2 + d)$.

This is the demand of public sector.

Therefore, the Purchasing Power of the Private Sector is :
$$(w_1n_1)/P_1^* = w_1n_1(b + d)/(ad - bc)$$

And, the Purchasing Power of the Private Sector is :
$$w_2n_2/P_1^* = w_2n_2(b + d)/(ad - bc)$$

And, from this, we can derive that :
$$w_1n_1(b + d)/(ad - bc) >> w_2n_2(b + d)/(ad - bc)$$
That is, purchasing power of the private sector is greater than the purchasing power of the public sector.

But, here, as half of the population has lower purchasing power and this half of the population holds a substantial part of total demand, as can be seen above, the market equilibrium price will not go up. This is because, if the market price is bid up, then a lot of the demand of the public sector will get rationed out of the market. Now, this forms a substantial part of the total demand. Thus, losing this demand will not be very desirable for the producers. Thus, as a result, the market price will remain at P_1^*.

Period 2 :

In this period, we attempt to mirror the situation following the Sixth Pay Commission report. Thus, there is a hike in the public sector wages only.

The hiked wage rate in the public sector = $w_2`$

Total income in the private sector = $w_1n_1 = w_1N$.

Total income in the public sector = $w_2`n_2 = w_2`N$.

Now, $w_1 \sim w_2`$.

And, as $n_1 = n_2$, $w_1n_1 \sim w_2`n_2$

Thus, the large income inequality that existed among the two sectors is largely eliminated.

Now, purchasing power in the private sector = w_1n_1/P_2

And, purchasing power in public sector = $w_2`n_2/P_2$

Let,

$P_2 = a_1 - b_1q_1$ --- Demand curve for private sector
q_2 = Private sector's demand. $a_1, b_1 > 0$
Private sector's demand doesn't change as their wages have remained at the same level.

$P_2 = a_2` - b_2`q_2`$ ---- Demand curve for public sector
$q_2`$ = Public sector's demand. $a_2`, b_2` > 0$
Public sector's demand changes as their wages have gone up. Now, as their wages have gone up, the choke price of demand goes up, such that $a_2` > a_2$. And, the demand elasticity goes down as due to a rise in wages they will now respond less to a certain rise in price, than before, such that, $b_2` < b_2$..

Therefore, $q_1 + q_2` = Q`$ ---- Joint demand of the two sectors.

As the wages of the two sectors have become similar now, the demand of the two sectors will also become more or less similar. Thus here, we have, $b_1 \sim b_2`$.

The economy's market supply curve $P_2 = c + dQ`$. $c, d > 0$

After horizontal summation of each sector's demand curve, we get the market demand curve as :
$P_1 = a` - b`Q`$, $a, b > 0$

where, $Q` = q_1 + q_2`$

At equilibrium,

$a – bQ` = c + dQ`$

⇨ $Q^{*`} = (a` - c)/(b` + d)$ ----- This is the equilibrium quantity.

$P_1^* = (a`d – b`c)/(b` + d)$ ----- This is the equilibrium price.

Deriving the demands of the two sectors individually, we get,

$q_1^* = (a_1 - c - dq_2`)/(b_1 + d)$

This is the demand of private sector.

Similarly $q_2^* = (a_2` - c - dq_1)/(b_2` + d)$.

This is the demand of public sector.

Therefore, the Purchasing Power of the Private Sector is :
$(w_1n_1)/P_2^* = w_1n_1(b` + d)/(a`d – b`c)$

And, the Purchasing Power of the Public Sector is :
$w_2n_2/P_2*` = w_2n_2(b` + d)/(a`d – b`c)$

And, from this, we can derive that :
$w_1n_1(b + d)/(ad - bc) \sim w_2n_2(b + d)/(ad - bc)$
That is, purchasing power of the private sector is more or less equal to the purchasing power of the public sector now.

Therefore, in this economy, a simple rise in wages in the public sector effectively reduces income inequality.

Computing,

$Q*` - Q* = [ a`(b+d) + c(b`-b) – a(b`+d)] / (b+d)(b`+d)$;

We observe that since $a`(b+d) + c(b`-b) > a(b`+d)$ and $(b+d)(b`+d) > 0$, it can be concluded that $Q*` - Q* > 0$. That is $Q*` > Q*$.

In other words, the equilibrium quantity demanded in the 2nd period is greater due to the hike in wages of the public sector.

Again, computing,

$P_2* - P_1* = [d(a`b-ab`) + d^2(a`-a) + cd(b-b`)] / (b+d)(b`+d)$;

We observe that since $d(a`b-ab`) + d^2(a`-a) > cd(b-b`)$, $cd(b-b`) < 0$, and, $(b+d)(b`+d) > 0$, it can be concluded that $P_2* - P_1* > 0$. Therefore, $P_2* > P_1*$.

In other words, the equilibrium price in the 2nd period is greater because now the total demand in the economy has risen, as seen before. That implies, there is an upward shift in the market demand curve. Thus, the equilibrium price has risen in this period. Also, purchasing power of the public sector has risen due to the hike in wages of the public sector. So, there is no danger of a large part of the population getting rationed out of the market due to a price hike, causing producers to lose out on a substantial amount of effective demand.

Thus, in an economy of this kind where there is no rural sector and the entire working population is employed in the urban organized sector, half each in the public and private sectors, the measure of hike in wages in the public sector achieves one of the objectives of the Government. In this situation, income inequality indeed falls and the problem of poverty is also solved to a large extent.

But, this view is perhaps a little too utopic to be true. In the next case we present our perception of the real situation that prevails in the country.

CASE II : OUR PERCEPTION OF REALITY

In this case, we take the help of some data while framing our model, unlike the previous case. This is being done because, here, we are discussing our perception of the reality, and, we are using the data to support our discussion.

Here, we are keeping the assumptions that the economy is static in terms of growth of the labour force and there is full employment in the economy. Also, there are 2N number of people employed in the labour force. But, we are doing away with the assumption of a fully urban economy. This economy has both the rural and urban sectors. Also, there are both the organised and the unorganised/informal sector present. Therefore, there are a large number of sectors in this economy. For simplicity, we are assuming that there are three sectors here, namely, private sector, public sector and a composite unorganised /informal sector. And, the agricultural sector is being taken as a representative of the unorganised sector, since, it presently employs 59% of the total labour force and forms 69% of total employment in the country.

Expert Group Statistics reveal that the organised sector employs about 14% and the unorganised sector employs the remaining 86% of the total labour force. Therefore,

$$(n_1 + n_2) = 14\% \text{ of } 2N = 7N/25$$

and, $n3 = 86\% \text{ of } 2N = 43N/25$

Therefore, $2N = n_1 + n_2 + n3.$

Wages in the three sectors are w_1, w_2 & w_3. These we shall substantiate through data, subsequently.

Period 1 :

Total income in the private sector = w_1n_1.

Total income in the public sector = w_2n_2.

Total income in agriculture = w_3n_3.

Here, $w_1 >> w_2$, as was the case before the salary hike following the Sixth Pay Commission.

Now, data from ASSOCHAM reveals that annual private sector wage in 2010 was about ` 3.5 Lac for freshly hired employees.
Thus monthly wage of private sector = Rs.3.5/12 ~ ` 30,000.
Thus, w_1 = ` 30,000.

Data from the official website of the 6th Pay Commission shows that monthly wage of public sector for assistant officers before revision of pay scale was ` 20,000.
Thus w_2 = ` 20,000.
We are considering the rank of assistant officers so as to maintain some kind of parity in skills between the comparison group of the private and public sectors.

Further, data from the Dept. of Labour and Employment, Govt. of India, shows that daily wages in the agricultural sector has more or less remained fixed at ` 179.30.
Thus, monthly wage, w_3 = ` 5370.
We consider skilled workers in the agricultural sector again to maintain some parity in skills between the three sectors.

Thus, $w_1 > w_2 >> w_3$.

There exists a large income inequality among the three sectors.

Now, purchasing power in the private sector = w_1n_1/P_1

Purchasing power in public sector = w_2n_2/P_1

And, purchasing power in agricultural sector = w_3n_3/P_1

Let,

$P_1 = a_1 - b_1q_1$ --- Demand curve for private sector
q_1 = Private sector's demand. $a_1, b_1 > 0$

$P_1 = a_2 - b_2q_2$ ---- Demand curve for public sector

q_2 = Public sector's demand. $a_2, b_2 > 0$

$P_1 = a_3 - b_3q_3$ ----- Demand curve for agricultural sector.
q3 = Agricultural sector's demand. $a_3, b_3 > 0$

Therefore, $q_1 + q_2 + q_3 = Q$ ---- Joint demand of the three sectors.

Before the wage hike in public sector, demand elasticity of agricultural sector is more than the demand elasticity of private sector and public sector, because their wages are low and thus they will respond more than their private and public sector counterparts to a certain rise in price. Thus, demand curve for agricultural sector is steeper than private sector`s demand curve which is steeper than public sector's demand curve.
Thus we have, $b_1 > b_2 > b_3$.

Let $P_1 = c + dQ$ be the economy's market supply curve.
$Q = q_1 + q_2 + q_3$; $c, d > 0$

After horizontal summation of each sector's demand curve, we get the market demand curve as :
$P_1 = a - bQ$,
where $Q = q_1 + q_2 + q_3$ $a, b > 0$

At equilibrium,

$a - bQ = c + dQ$
⇨ $Q^{**} = = (a - c)/(b + d)$ ----- This is the equilibrium quantity.

$P_1^{**} = (ad - bc)/(b + d)$ ----- This is the equilibrium price.

Deriving the demands of each of the individual sectors :

$a_1 - c - dq_2 - dq_3 = q_1(d + b_1)$
⇨ $q_1^{**} = [a_1 - c - d (q_2 + q_3)]/(d + b_1)$ ------- Private Sector`s Demand.

Similarly,

$q_2^{**} = [a_2 - c - d (q_1 + q_3)]/(d + b_2)$ ------- Public Sector`s Demand.

$q_3^{**} = [a_3 - c - d (q_1 + q_2)]/(d + b_3)$ ------- Agricultural Sector`s Demand.

In period one, private sector is paid the highest wage, followed by public sector. Agricultural sector, being the unorganized sector is paid the lowest wage. Thus there exists inequality among the three sectors. Purchasing power of private sector is highest followed by public sector and agricultural sector.

Thus we have,

$w_1n_1/P_1^* > w_2n_2/P_1^* >> w_3n_3/P_1^*$.

And, from this, we can derive that :
$w_1n_1(b + d)/(ad - bc) > w_2n_2(b + d)/(ad - bc) >> w_3n_3(b + d)/(ad - bc)$.

Period 2 :

In this period, there is a hike in the public sector wages following the Sixth Pay Commission report.

The hiked wage rate in the public sector = w_2`

Total income in the private sector = w_1n_1

Total income in the public sector = w_2`n_2

Now, data from the official website of the 6th Pay Commission shows that monthly wage of public sector for assistant officers after revision of pay scale was ` 30,000.
Thus w_2 = ` 30,000.
That is, $w_1 = w_2$`.

And, wages in the private sector and agriculture has largely remained the same. Thus, the large income inequality that existed among the two sectors is largely eliminated.

Let,

Now, purchasing power in the private sector = w_1n_1/P_2

Purchasing power in public sector = w_2`n_2/P_2

And, purchasing power in agricultural sector = w_3n_3/P_1

$P_2 = a_1 - b_1q_1$ --- Demand curve for private sector
q_1 = Private sector's demand. $a_1, b_1 > 0$

$P_2 = a_2' - b_2' q_2'$ ------ Demand curve for public sector [$q_2' > q_2$, since with wage hike, demand rises]
q_2' = Public sector's demand. $a_2' > a_2, b_2' > b_2$
$a_2', b_2' > 0$

$P_2 = a_3 - b_3q_3$ ----- Demand curve for agricultural sector.
q_3 = Agricultural sector's demand. $a_3, b_3 > 0$

Therefore, $q_1 + q_2' + q_3 = Q'$ -------Joint demand of the three sectors.

After horizontal summation of each sector's demand curve, we get the market demand curve as :

$P_2 = a' - b'Q'$ $\quad\quad$ $a' = a_1 + a_2' + a_3$

$Q' = q_1 + q_2' + q_3$ $\quad\quad$ $a', b' > 0$

$P_2 = c + dQ'$ ----- Economy's market supply curve.

$Q' = q_1 + q_2'$

$c, d > 0$

In this case, as the bulk of demand is made by the public and private sectors, the demand made by the agricultural sector becomes insignificant for the producers.

At equilibrium we have, $a - bQ = c + dQ$

- $\Rightarrow Q^{**'} = (a' - c)/(b + d)$ ----- This is the equilibrium quantity.
  $P_2^{**} = (a'd + b'c)/(b' + d)$ --- This is the equilibrium price.

Deriving the demands of each of the individual sectors :

$a_1 - b_1q_1 = c + dq_1 + dq_2$

- $\Rightarrow a_1 - c - dq_2 = q_1(d + b_1)$
- $\Rightarrow q_1^{**} = (a_1 - c - dq_2)/(d + b_1)$

Similarly, $q_2^{**} = (a_2` - c - dq_1)/(d + b'_2)$

$q_3^{**} = (a_3 - P_2^{**})/ b_3$

- $\Rightarrow (a_3b + a_3d - ad + bc)/b_3$

Now, taking the help of data, we observe,

Purchasing power of private sector = w_1n_1/ P_2^{**}
$= 30000n_1/P_2^{**}$

Purchasing power of public sector = $w_2'n_2/ P_2^{**}$
$= 30000n_2/ P_2^{**}$

Purchasing power of agricultural sector = w_3n_3/ P_2^{**}
$= 5370n_3/ P_2^{**}$

Since the workforce is just reallocated among the three sectors, total population size has not changed and as market prices are given in all periods, we have:

$30000n_1/P_2^{**} \geq 30000n_2/ P_2^{**} >> 5370n_3/ P_2^{**}$

Thus, we see that purchasing power of public sector has increased and now is close to that of private sector, unlike period 1 where purchasing power of private sector was much greater than that of public sector. Purchasing power of agricultural sector has however remained unchanged and thus it is much less that the purchasing power of both private and public sector.

Computing,

$Q^{**\prime} - Q^{**} = (a' - a)/(b + d)$
$a', a, b > 0, a_2' > a_2$
$\Rightarrow a' > a$
Thus, $(Q^{**\prime} - Q^{**}) > 0$
$\Rightarrow Q^{**\prime} > Q^{**}$

And, this is mainly due to the fact that $q_1^{**`} + q_2^{**`} > q_1^{**} + q_2^{**}$; $q_3^{**`} \sim q_3^{**}$.

Again, computing,

$P_2^{**} - P_1^{**} = [a'(d^2 + db) + b'(2bc + cd - ad) - ad^2 + bcd]/(b'+d)(b + d)$
$a', b', c, d, a, b, > 0$
$\Rightarrow (P_2^{**} - P_1^{**}) > 0$
$\Rightarrow P_2^{**} > P_1^{**}$

Thus, here it can be observed, that with the wage hike, as public sector wages tend to be almost equal to that of private sector, public sector's demand rises ($q_2' > q_2$). Thus now bulk of the market demand comes from public and private sectors. Hence for producers, demand by the agricultural sector becomes insignificant. Due to this excess demand, producers raise the market price. Thus low purchasing power, coupled with high market price leads to further inequality in the economy. Also, due to the price hike, the unorganized sector doesn't only lose out in terms of having to face higher price, but also, gets rationed out of the market. Thus, inequality is perpetuated further.

SECTION III : THE POLITICAL ECONOMY MODEL

In this section, we attempt to discuss and examine the probable reasons behind the Government's adoption of the new policy. Our perception is that perhaps there is something more than pure economics at play here. So, we shall attempt to introduce political economy and analyse the issue. We are using a game-theoretic framework, in our model, to analyse the political economy situation.

In our model, we formulate three sequential games. The first game involves government and private sector as players, the second game has government and public sector as players and the third game has government and unorganized sector as players. In each of the three games, we consider the Government to be the first mover, having the first-mover advantage. Here, we are considering that this advantage is the presence of information with the Govt. regarding all the three sectors.

And, the pay-offs are actually arbitrary in nature. We have taken them in changes of 5 to denote a gain or loss of the players. They could've been taken in terms of any other number and still we would get the same result.

GAME 1 :

Players : a. Government
b. Private Sector

Strategies :

Government - i. Regulate private sector (R)
ii. Do not regulate private sector (NR)

Private Sector - i. Make political / campaign contributions (PC)
ii. Do not make political / campaign contributions (NPC)

This is taken to be a complete information game, as Govt. has the first-mover advantage and the private sector generally has mechanisms to collect information about the strategies of the Govt..

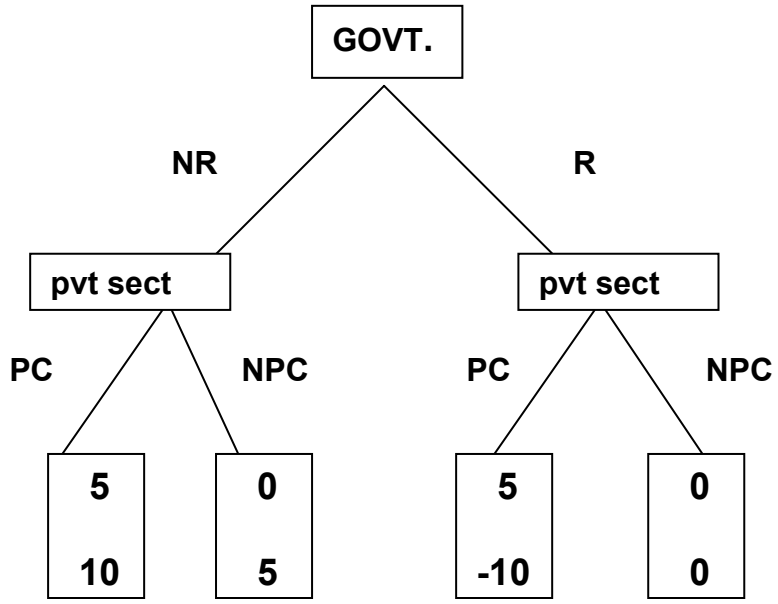
Explaining the Pay-off structure :

1. Govt. plays NR & Private sector plays PC : Govt. gains in terms of the contributions made, and, private sector gains both in terms of non-regulation from Govt. and extra patronising from the Govt.

2. Govt. plays NR & Private sector plays NPC : Govt. doesn't gain anything. Private sector gains both in terms of non-regulation and non-contribution.

3. Govt. plays R & Private sector plays PC : Govt. gains in terms of contributions. Private sector loses both in terms of regulation and making contributions.

4. Govt. plays R & Private sector plays NPC : None gain anything.



Here, since, this is a sequential game of complete information, we compute the Sub-Game Perfect Nash Equilibrium (SPNE) that turns out to be : *{ NR, (PC, NPC) }.*

That is, if Govt. practices non-regulation, only then will private sector make political / campaign contributions. If the Govt. regulates, then the private sector will not contribute at all. Thus, the Govt. has no incentive to regulate private sector salaries.

GAME 2 :

Players :
a. **Government**
b. **Public Sector**

Strategies :

Government - i. Raise public sector salaries (R)
ii. Do not raise public sector salaries (NR)

Public Sector - i. Provide support to this Govt. (S)
ii. Do not provide support to this Govt. (NS)

This is also taken to be a complete information game, as the Govt. has the first mover advantage and the public sector generally knows what the Govt. is doing.

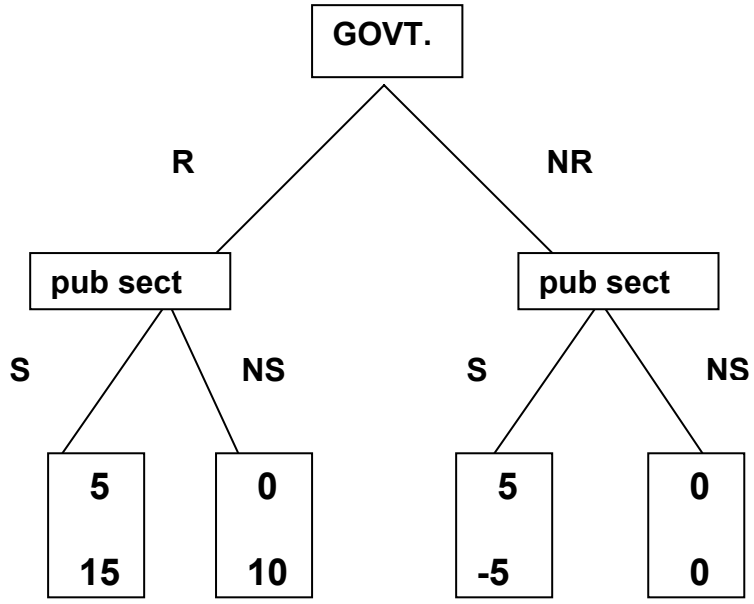
Explaining the Pay-off structure :

1. Govt. plays R & Public sector plays S : Govt. gains in terms of support received, and, public sector gains both in terms of huge wage hikes and extra patronising from the Govt. for supporting it.

2. Govt. plays R & Public sector plays NS : Govt. doesn't gain anything. Public sector gains in terms of huge wage hikes.

3. Govt. plays NR & Public sector plays S : Govt. gains in terms of support received. Public sector loses out on the wage hikes.

4. Govt. plays NR & Public sector plays NS : None gain anything.



Here, since, this is a sequential game of complete information, we compute the Sub-Game Perfect Nash Equilibrium (SPNE) that turns out to be : *{ R, (S, NS) }.*

Therefore, if Govt. raises public sector salaries, only then will public sector provide active support to the Govt., otherwise they will not support the Govt. Thus, Govt. has every incentive to raise public sector salaries.

GAME 3 :

Players :
a. Government
b. Unorganised Sector

Strategies :

Government - i. Raise unorganised sector wages (R)
ii. Do not raise unorganised sector wages (NR)

Unorganised Sector - i. Vote for this Govt. (V)
ii. Do not vote for this Govt. (NV)

This is taken to be an incomplete information game, with unorganised sector being unsure of Govt.'s strategy. But, they have a belief about Govt.'s strategy.

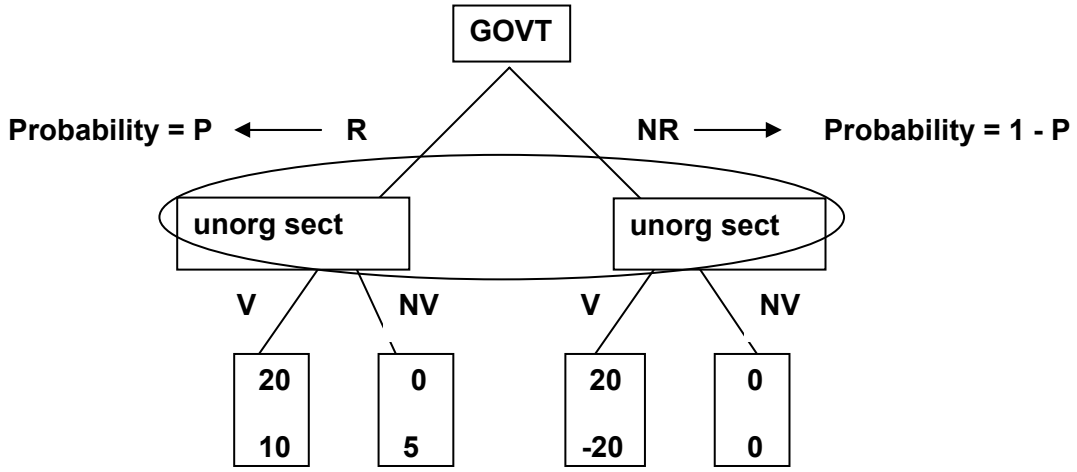
Explaining the Pay-off structure :

1. Govt. plays R & Unorganised sector plays V : Govt. gains in terms of huge no. of votes received from a large population, and, unorganised sector gains in terms of wage hikes.

2. Govt. plays R & Unorganised sector plays NV : Govt. doesn't gain anything. Unorganised sector gains in terms of wage hikes.

3. Govt. plays NR & Unorganised sector plays V : Govt. gains in terms of huge no. of votes received from a large population. Unorganised sector loses out on wage hikes and giving support almost uselessly.

4. Govt. plays NR & Public sector plays NV : None gain anything.



Here, since, this is a sequential game of incomplete information, we compute the perfect Bayesian Equilibrium (PBE) that turns out to be : *{ R, (V, NV) }.*

And, if P > 4/5, i.e., people in unorganised sector believe that there is more than 80% probability of their wages are rising, then, they will vote for the Govt.

Therefore, the Govt. only really has to build up the belief that unorganized sector wages are indeed rising, rather than actually having to raise it.

Thus, here we observe that the Govt. has an incentive to raise public and private sector wages, but has no incentive to actually raise the unorganized sector wages as this sector has very little true information. Thus, situation of this sector will improve only if they start having a better quality of information.

SECTION IV : POLICY IMPLICATIONS

Through this paper, we observe that this large hike in the public sector wages is not really helping the country achieve one of the major objectives envisioned by the Government. In fact, instead of reducing inequality and poverty, this policy is actually ending up aggravating the situation by raising the wage differential essentially the rural and urban sectors of the economy. Thus, inequality is rising instead of getting eliminated, and, is specially hurting those who have just about managed to stay above the poverty line, those who are perhaps the most vulnerable section of the population. Therefore, this policy is effectively accentuating income inequality and aggravating poverty, both of which are already major problems in India.

In this section, we discuss certain policy implications that may help this situation.

The Government should not compete with the private sector and bid up public wages. Rather, the job of the Government is to govern. And, that is exactly what it should do in this situation. The Government should develop a regulatory mechanism through which the private sector wages may be regulated and may be prevented from going beyond a certain permissible level.

Further, the Government should also have some mechanism in place that would prevent a blind transfer of technology, especially by the multi-national corporations. The idea that, technology transfer with no regard to the conditions prevailing in the domestic economy has very serious implications for the domestic economy, has already been championed by the balanced growth theorists and allied schools of thought.

Finally, instead of hiking wages, the Government should invest in building infrastructure and imparting education and skills to the labour force employed in the unorganized sector. These would actually help the people get better paying jobs and would also help in creating more job

opportunities. And, as a result, income inequality would start to fall and would help a large population free themselves from the clutches of poverty.

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Table 1 : Public Sector wages before and after the Sixth Pay Commission

	Old Scale	New Scale		Group
1.	2550-55-2660-60-3200	S1	6500-150-9500	Auxiliary Staff- Gr D
2.	2610-60-3150-65-3540			
3.	2650-65-3300-70-4000	S2	7000-200-13000	
4.	2750-70-3800-75-4400(D)			
	2750-70-3800-75-4400 (C)	S3	7500-250-12500	Supporting Staff – C
5.	3060-75-3950-80-4500			
6.	3200-85-4900			
7.	4000-100-6000	S4	10000-300-17500	
8.	4500-125-7000			
9.	5000-150-8000 C/B N/G	S5	12500-400-22500	Supervisory Staff, B/NG
10.	5500-175-9000 C/B N/G			
11.	6000-190-9800 C/B N/G	S6	15000-500-27000	
12.	6500-200-9800 C/B N/G			
13.	6500-200-10500 C/B N/G			
	6500-200-10500 B GAZ	S7	17500-800-30500	
14.	7450-225-11500 B G/NG & C			
15.	7500-200-12000			
16.	8000-275-13500	S8	20000-800-35000	Asst. Officer B
17.	9000 (Fixed)			
18.	9000-275-9550			
19.	10325-325-12575			
20.	10000-325-15200	S9	25000-1000-40000	JS
21.	10650-325-15850			
22.	12000-375-16500	S10	30000-1200-48000	SS
23.	12750-375-16500			
24.	12000-375-18000			
25.	12300-400-18300			
26.	14300-400-18300			
27.	15100-400-18300			
28.	16400-450-20000	S11	42000-1400-56000	JAG/SG
29.	16400-450-20900			
30.	14300-450-22400			

31.	16400-450-20900-500-22400			NFIG
32.	18500-500-22400	S12	60000 (Fixed)	SAG
33.	22400-525-24500	S13	65000 (Fixed)	HAG
34.	22400-500-25000	S14	70000 (Fixed)	A Secy
35.	24050-550-25000			
36.	25000 (Fixed)	S15	75000 (Fixed)	Secy
37.	30000 (Fixed)	S16	80000 (Fixed)	C Secy

Source : Official website of Sixth Central Pay Commission of India

Table 2 : Minimum wages in the unorganised sector, Central figures

Sr. No.	Name of Scheduled Employment	Category of Workers	Rate of wages including VDA per day (in Rs.)		
			Area A	Area B	Area C
1	Agriculture	Unskilled	163	148	146
		Semi skilled/ Unskilled Supervisor	179	165	151
		Skilled/ Clerical	194	179	164
		Highly Skilled	216	199	179
2	Workers engaged in Stone Mines for Stone Breaking and Stone Crushing	1. Excavation & removal of over burden with 50 m lead/1.5 meters lift			
		(a) Soft Soil	156.91		
		(b) Soft Soil with Rock	237.83		
		(c) Rock	314.84		
		2. Removal and Staking of rejected stones with 50 meters lead 1.5 meters lift	125.14		
		Stone Breaking or Stone Crushing for the stone size			
		(a) 1.0 inch to 1.5 inches	977.38		
		(b) Above 1.5 inches to 3.0 inches	835.01		
		(c) Above 3.0 inches to 5.0 inches	488.16		
		(d) Above 5.0 inches	400.59		
3	Sweeping and Cleaning	Unskilled	234	194	156
4	Watch and Ward	Without Arms	234	194	156
		With Arms	259	220	182
5	Loading and Unloading	Unskilled	234	194	156
6	Construction	Unskilled	234	194	156
		Semi skilled/ Unskilled Supervisor	259	220	182
		Skilled/ Clerical	285	259	220

		Highly Skilled	310	285	259
			Above Ground	Below Ground	
7	Non-Coal Mines	Unskilled	156	194	
		Semi skilled/ Unskilled Supervisor	194	234	
		Skilled/ Clerical	234	272	
		Highly Skilled	272	310	

Sr. No.	Name of Scheduled employment	Nomenclature
1	Agriculture (1)	Agriculture
2	Workers engaged in Stone Mines for Stone Breaking and Stone Crushing (1)	Workers engaged in Stone Mines for Stone Breaking and Stone Crushing
3	Sweeping and Cleaning (1)	Employment of Sweeping and Cleaning excluding Activities prohibited under the Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act, 1993
4	Watch and Ward (1)	Employment of Watch and Ward
5	Loading and Unloading (1)	Employment of Loading and Unloading in (i) Goods Shed, Parcel Officers of Railways; (ii) Other Goods sheds, Godowns, Warehouses, etc. and; (iii) Docks and Ports
6	Construction (4)	Construction or maintenance of Roads and Runways or in Building Operations including laying down Underground Electric, Wireless, Radio, Television, Telephone, Telegraph and Overseas Communication Cables and similar other Underground Cabling Work, Electric
7	Non-Coal Mines (36)	Employees engaged in the employment of Gypsum Mines, Barytes Mines, Bauxite Mines, Manganese Mines, China Clay Mines, Kynite Mines, Copper Mines, Magnesite Mines, White Clay Mines, Stone Mines, Stone Mine, Statite Mines (including mines producing Soap

Area "A"

Ahmedabad (UA)	Delhi (UA)	Kanpur (UA)
Bengaluru (UA)	Greater Mumbai (UA)	Lucknow (UA)
Kolkata (UA)	Hyderabad (UA)	Chennai (UA)
Nagpur (UA)		

Area "B"

Agra (UA)	Gorakhpur	Mysore (UA)
Ajmer	Guwahati City	Nasik (UA)
Aligarh	Guntur	Pune (UA)
Allahabad (UA)	Gwalior (UA)	Patna (UA)
Amravati	Indore (UA)	Raipur (UA)
Aurangabad (UA)	Hubli- Dharwad	Rajkot
Bareilly (UA)	Jabalpur (UA)	Ranchi (UA)
Bhavnagar	Jaipur (UA)	Sholapur (UA)
Bikaner	Jamshedpur (UA)	Srinagar (UA)

Bhopal	Jodhpur	Surat (UA)
Bhubaneshwar	Kochi (UA)	Tiruvanantapuram (UA)
Amritsar	Kolhapur (UA)	Vadodara (UA)
Chandigarh (UA)	Kozhikode (UA)	Varanasi (UA)
Coimbatore (UA)	Kota	Vijaywada (UA)
Cuttack (UA)	Ludhiana	Vishakhapatnam (UA)
Durgapur	Madurai (UA)	Warangal
Faridabad Complex	Meerat (UA)	
Ghaziabad (UA)	Moradabad (UA)	

Source : Department of Labour & Employment, Govt. of India, October 2010.

Table 3 : Minimum wages in the unorganised sector, West Bengal figures

Sr.No.	Name of the Scheduled Employments	Area	Category of worker- skill wise			
			Unskilled	Semi-skilled	Skilled	Highly Skilled
			Total Minimum Wages per day (In Rs)	Total Minimum Wages per day (In Rs)	Total Minimum Wages per day (In Rs)	Total Minimum Wages per day (In Rs)
1	Agriculture	WB	127 without food 118 with food	140 without food 131 with food	154 without food 145 with food	-
2	Bell Metal and Brass Industry	ZONE A	162.23	178.46	196.31	
		ZONE B	144.69	159.15	175.07	-
3	Ceramic Industry	ZONE A	162.23	178.46	196.31	
		ZONE B	144.69	159.15	175.07	-
4	Chakki Mills	ZONE A	162.23	178.46	196.31	
		ZONE B	144.69	159.15	175.07	-
5	Cinchona Plantation	WB	ADULT WORKER 127.73			
6	Clinical Nursing Home	ZONE A	162.23	178.46	196.31	215.92
		ZONE B	144.69	159.15	175.07	192.57
7	Construction & Maintenance of Road or building operation	ZONE A	162.23	178.46	196.31	215.92
		ZONE B	144.69	159.15	175.07	192.57
8	Dal Mills	ZONE A	162.23	178.46	196.31	
		ZONE	144.69	159.15	175.07	

		B				
9	Decoration	ZONE A	162.23	178.46	196.31	
		ZONE B	144.69	159.15	175.07	-
10	Fishery	WB		ADULT WORKER 127.38		
11	Flour Mills	ZONE A	162.23	178.46	196.31	215.92
		ZONE B	144.69	159.15	175.07	192.57
12	Godown(WB)	ZONE A	162.23	-	-	-
		ZONE B	144.69			
13	Handloom	WB	94.19	-	-	-
14	Hosiery Industry	ZONE A	162.23	178.46	196.31	
		ZONE B	144.69	159.15	175.07	-
15	Medicinal Plant other than Cinchona	WB		ADULT WORKER 127.73		
16	Oil Mills	ZONE A	162.23	178.46	196.31	
		ZONE B	144.69	159.15	175.07	-
17	Paints & Chemicals Factories	ZONE A	162.23	178.46	196.31	215.92
		ZONE B	144.69	159.15	175.07	192.57
18	Paper Board & straw Board Mfg. Industry	ZONE A	162.23	178.46	196.31	
		ZONE B	144.69	159.15	175.07	-
19	Plastic Industry	ZONE A	162.23	178.46	196.31	
		ZONE B	144.69	159.15	175.07	-
20	Plywood Industry	ZONE A	162.23	178.46	196.31	
		ZONE B	144.69	159.15	175.07	-
21	Power Loom (Less than 10 person)	ZONE A	162.23	178.46	196.31	
		ZONE B	144.69	159.15	175.07	-
22	Power Loom (10 or more person)	ZONE A	162.23	178.46	196.31	
		ZONE B	144.69	159.15	175.07	-
23	Rice Mills	WB	127.73	140.11	154.11	169.54
24	Rope Industry	ZONE	162.23	178.46	196.31	

		A				
		ZONE B	144.69	159.15	175.07	-
25	Salt Manufacturing Industry	WB	127.73	140.11	154.11	169.54
26	Saw Mills	ZONE A	162.23	178.46	196.31	
		ZONE B	144.69	159.15	175.07	-
27	Security services	ZONE A	162.23	178.46	196.31	
		ZONE B	144.69	159.15	175.07	-
28	Shoes Making Industry	ZONE A	162.23	178.46	196.31	
		ZONE B	144.69	159.15	175.07	-
29	Silk Printing	ZONE A	162.23	178.46	196.31	
		ZONE B	144.69	159.15	175.07	-
30	Stone Breaking and Stone crushing	ZONE A	162.23	178.46	196.31	
		ZONE B	144.69	159.15	175.07	-
31	Sweeping and cleaning excluding activities prohibited under the Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act, 1993	ZONE A	162.23	178.46	196.31	
		ZONE B	144.69	159.15	175.07	-
32	Tailoring Industry	ZONE A	162.23	178.46	196.31	
		ZONE B	144.69	159.15	175.07	-
33	Tanneries & Leather Manufacturing	ZONE A	162.23	178.46	196.31	-
		ZONE B	144.69	159.15	175.07	

N.B. **Implementing areas : Zone 'A'=** (i) Areas Notified under Kolkata Metropolitan Development Authority (KMDA), (ii) Asansol Municipal Corporation, (iii) Durgapur Municipal Corporation, (iv) Siliguri Municipal Corporation, (v) Haldia Municipality, (vi) Digha Development Authority and (vii) Thermal Power Plant areas including Township areas.

Zone 'B' = Rest of West Bengal

Source : Department of Labour & Employment, Govt. of India, January 2011.