ILLUSIVE AND INSINCERE ECONOMIC AGENDA OF NEPALESE POLITICAL PARTIES: BUILDING A ROAD MAP FOR NEPAL’S ECONOMIC GROWTH

Ram C Acharya

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Abstract
In the Election Platforms of recently held Constituent Assembly/Parliament election, three major political parties in Nepal, Nepali Congress, United Marist-Leninist and United Communist Party (Maoist) have promised a MOON to the people if they form the government. They have promised to attain annual per capita income growth of 10% for the next 10/20/40 years and have offered plethora of programs to be implemented on every sector of the economy. In this paper, I evaluate the three parties’ economic agenda and find that their “promises” may look “visionary” to them but in substance, they are insincere, downright illusive, and sometimes irrelevant. Their agenda are jumbled wish lists, lacking basics of aligning instruments with targets. To fill this gap, I lay out a comprehensive framework for economic growth outlining its determinants and identify major impediments to them in Nepal. I show that Nepal’s major growth obstacles are distorted investment priorities, massive inequality of opportunity, pervasive rents and rent-seeking activities, incentive-penalizing institutions and extremely self-centered own payoff maximizing political parties. Not only investment rate is very low but most of the investment is on wealth transfer rather than wealth creation and services duplication rather than services creation. Nepal has ridiculed both the “efficiency”—growth pace not even one-third of its neighbours and unemployment rate at 22% and “equality of opportunity”—where only 12% of eligible ages have completed grade 10 education. Furthermore, because of distortion caused by rent-seeking activities, in conducting business, my calculation shows that Nepal is 42% more expensive than the most efficient country in the world, 23% more expensive than China and 15% more expensive than India. Add into this, the disadvantage of land-locked, small size, less skilled labor, and frequent strikes, Nepal has insurmountable costs that hinder business, foreign investment and growth. Nepal’s long term sustained economic growth and development requires several and drastic policy changes—different from what the parties have promised—which I recommend as a 12-point agenda.

Key Words: Nepalese political parties; Economic growth; Investment; Human capital; Rent-seeking economy; Land reform; Fiscal policy; International trade

1 Email: acharya.ramc@gmail.com
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Illusive and Incoherent Economic Agenda of Nepalese Political Parties:
Building a Road Map for Economic Growth

1. Introduction
In the recent Constituent Assembly II / Parliament election in Nepal, out of 601 members, the political parties that won the largest number of seats (from largest to smallest) are: Nepali Congress (NC), United Marxist Leninist Party (UML), and United Communist Party, Maoist (hereafter UCP). In their Election Platforms, all three parties have outlined agenda on what economic policies they would implement in the event they had chance to form the government. The agenda are for one year, five-year, 10-year and in some cases for 20- and 40-year. Among these three parties, the NC and the UML have been regularly either in the government or in opposition since 1990, the year Nepal turned from absolute to constitutional monarchy. Before that they were opposed to absolute monarchy and were out of government. The UCP continued its opposition even after 1990 change, waged a decade (1996-2006) long armed struggle and won the largest seats in the election for Constitutional Assembly I held in 2008. Subsequently, Nepal became a republic, and for the last six years, UCP had been a major political force until it was reduced to the third position in the recent election.

As these three parties have the largest seats in the Parliament, Nepal’s future depends on what public policies they pursue. Amidst this, one of the objectives of this paper is to simplify/decode their economic agenda as presented in the Election Platforms, which are not that obvious (sometime quite implicit). The second objective is to assess their economic agenda in terms of urgency, relevancy, and consistency. I do this not because I believe the parties are trustworthy—they are not—and could be held accountable for underperformance. Rather my intension is to evaluate that even if the parties “fulfill” their agenda, are they the right ones to reverse or correct the growth-inhibiting and inequality-widening policies that have gripped Nepal for so long. As a windfall, if this paper becomes an instrument in setting the bar for the parties’ litmus test on their “work performance” in the eyes of citizenry, so much so good. The third objective is to lay out a comprehensive economic framework identifying all determinants of economic growth and analyzing what ails each of them against which the relevancy of parties’ agenda can be tested. Finally, in charting the way forward, I present a 12-point policy recommendations—if implemented as a package—would put Nepal in a sustained long term economic growth and development path.
These three parties call themselves socialist, champions of the poor, super-democrat, growth-minded, nationalist and also visionary. In an attempt to be eligible for all of the above super-adjecitives, the parties promise numerous programs, a few of which are as follows. In Nepal, where historical annual per capita income growth rate has been less than 2.5%, the parties target annual growth rate of 10% for the next one/two decades—which no countries in the world have achieved so far on a sustained basis. They aim to increase investment to GDP rate from historical average of 25% to 40% range without assuring how and also whether only investment increase would be a panacea for the stagnated economy. They promise free education till 12th grade where existing “free education” has been a fiasco such that only 11% of students that start grade 1 complete SLC without failing. They promise to eliminate unemployment—which stands at about 22%—despite the fact that one-quarter of all youth and 48% of male youth have left the country for dangerous manual work in foreign countries. They promise to build several north-south, east-west highways, railway, housing for 500,000 households, ropeway, regional and international airports etc. In a country which cannot generate even 150 MW of hydro power annually, they promise to generate 10,000 MW in ten years, 25,000 MW in 20 years. In a country whose exports are not even one-quarter of its imports, they aim for trade surplus. This list is just a tip of the iceberg of parties’ hodgepodge promises.

They promise big without explaining why these facilities are needed, why they should be the priority and how to finance them. In a nutshell, their promises remind a dialogue that occurred about 30 years ago between a Candidate for Rastriya Panchayat (then Parliament under absolute monarchy when political parties were banned) and a voter in a remote area of Nepal. It goes like this. The candidate in his vote seeking speech makes a pitch, “If I am elected as a Member of Parliament, I will construct a bridge in this village so that it is connected with the next village”. After the speech was over, a farmer visibly scared, first apologies for what he is going to say and with difficulties completes his sentence, “sir, there is no river in this village, so we may not need a bridge; rather we need a school as we don't have one”. The candidate with big laugh responses immediately, “in that case, you have even more reasons to vote for me: If elected I will bring both: river and bridge, but don’t tell me that you don’t have another village around, which I cannot bring.”

Judging by the promises made in the Platforms, the parties are implying that, if elected, they can bring almost all three: a bridge, a river, and a village (which I dubbed as promising a
MOON). Some of the promises are irrelevant (as bridge), some are impossible (as river), and yet, more pressing needs are ignored (as demand for a school). These programs may look “visionary” to the parties but in substance they are illusive. If anything, they reflect parities’ insincerity towards the plight of the people. The parties did not have to promise a MOON; one just wishes that they were more realistic and focussed on removal of major obstacles to economic growth and development.

Nepal’s failing is the outcome of wrong economic policies—economic growth and economic equity—which are about how to increase the size of pie (production) and how to share the pie among citizens. Some economic policies may create trade-off between these two goals (achieving one but being further from the other), whereas others help achieve both. In Nepal where there is grinding poverty, huge income disparity and social sector generates perverse effects (works against claimed equalizer of opportunity among citizens), there are policies which can enhance both. Many growth-inhibiting policies in Nepal are not only inefficient—reducing the size of the pie—they are inequitable also, raising inequality. As found by Persson and Tabellini (1994) in a country where income inequality is greater, political decisions are likely to result in policies that lead to less growth. Nepal fits into this category. Acknowledging that there are serious distribution issues in Nepal which is dealt in Acharya and Sangraula (2011), the focus of this paper is on economic growth. Nevertheless, from growth perspective, I cover distribution issues substantially, while discussing investment, education, and institutions.

The need for higher economic growth in Nepal cannot be overemphasized. I bring several facts throughout the paper that urge this need, but one is worth citing at the outset. Because of its sluggish growth, Nepal’s relative size vis-à-vis its two neighbours (China and India) is falling rapidly. Going back 40 years, in 1972, China’s GDP was 60-times and India's GDP was 70-times higher than that of Nepal. Fast forward 2012, China and India became 412- and 125-times larger than Nepal. Consequently, a Nepali who was as rich as a Chinese or an Indian few decades ago, fairs measurably today ($400 at 2005 constant US$), as income of a Chinese ($3,348) is equal to that of eight Nepalese and income of one Indian ($1,107) is equal to that of almost three Nepalese. A higher growth economy would create more resources not only in the hands of individuals but also to the government which could be used in financing public services, such as education, health, road networks and so on.
Today, Chinese per capita income at is 8-times and Indian per capital income ($1,107) is about 3-times higher than Nepalese per capita income ($400). Simply put, on average, income of a Chinese is equal to the income of eight Nepalese and one Indian earns equal to almost that of Nepalese.

Growth requires that country’s resources—whether physical, human, financial—are used efficiently, which in turn requires that the government provides equality of opportunity (where parents’ education level and income do not have substantial impact on children’s earnings in the adulthood) for citizens. A country achieves the targeted efficiency and equity through public policies (such as fiscal, monetary, labor market, education, health etc.), and in that pursuit it should allow the market to work freely in most of the cases, regulate it when needed for level playing fields and correct it when fails. One would hope that the parties build programs with the same sincerity: what are the major problems regarding efficiency and equity, why do they exit and what policy corrections are needed. However, that is not the case; the parties have failed to indentify the problems and to link targeted objectives (ends) with instruments (means).

The major obstacles to Nepal’s growth are multifaceted and several. However, there are some which if not addressed first, will nullify any other attempt for higher growth. Those obstacles are: no rule of law, pervasive rent (payment higher than what a person is adding value to the society by his/her work) and rent-seeking activities (the attempt to collect rent by manipulating political systems or benefitting from market failure). In the same breadth, corruption, lack of meritocracy, politicization of all occupations and triumph of party perks over anything else, make the list of major growth obstacles. These anomalies do not come from thin air; they are of parties’ own making—their own brainchildren. Because of these parties’ imposed costs, my calculation shows that in carrying business, Nepal is 42% more expensive than the most efficient country in the world, 23% more expensive than China and 15% more expensive than India. Add into this, the disadvantage due to land-locked, small size, less skilled labor, and frequent strikes, Nepal has insurmountable additional costs hindering business, foreign investment and growth. Nepal’s growth requires drastic and several policy changes to correct these root causes of stagnation.

Put bluntly, the political, cultural, social, economic and institutional set up that the political parties have nurtured are the major barriers to Nepal’s growth and equity. Correcting them is essential for any good economic policies to have desired impact. But for political parties, these changes would mean losing their perks and privileges that they have enjoyed as being “superior
to” and “masters of” the ordinary citizens. It is perhaps naïve to expect such policy changes to come from them unless there is a massive opposition from the grass root level. The rallying point for ordinary Nepalese to consider is that by not addressing those anomalies but claiming to have double-digit economic growth, the political parties are boasting to go for a million mile race but refusing to take the first step. This is simply a deception and surely Nepalese would demand honesty and accountability from their politicians.

The rest of the paper is organized as follows. In section 2, I compare Nepal with China and India; in section 3, I decode the growth agenda of the three parties and in section 4, I compare parities growth agenda with growth rates achieved by world growth leaders in each of the last four decades. In section 5, I provide an economic framework on what factors contribute to economic growth. In section 6, I connect this framework with actual data and identify major growth obstacles in Nepal. In section 7, I ask, why the parties have to promise so much to Nepali people instead of being more realistic. In section 8, I summarise the paper and recommend 12-point policies that would put Nepal on higher growth trajectory.

2. Nepal and Its Neighbours
Measured by per capita income, on average, no other Asian nationals are poorer than Nepalese, and there are only 11 countries clustered in sub-Saharan Africa with lower per capita income than of Nepalese. While Nepal is slipped increasingly into economic despair, its two neighbours, China and India, have attained rapid and sustained growth rates, almost unparallel in history. Companies nurtured in these markets are putting enormous competitive pressure even to the most efficient multinational firms in the world. These countries did not achieve this economic efficiency and power by any sort of miracle (finding mining, oil and other minerals under the ground); they climbed the ladder of development by implementing good economic policies. By the same token, Nepal's misery is the making of, no other countries, but its own bad policy choices by Nepalese politicians and policymakers. Moving forward, Nepal’s prosperity
depends on whether a right set of economic policies will be adopted, which have been so difficult to come by.

Nepal's relative size vis-à-vis its two neighbours is falling rapidly. Going back in 40 years ago, in 1972, measured by GDP, Nepal was 1.7% of China's and 1.4% of India (Figure 1). Put differently, China's GDP was 60-times and India's GDP was 70-times higher than that of Nepal. Fast forward 2012, Nepal's GDP was 0.2% of China and 0.8% of India (China became 412 times larger and India became 125 times larger than Nepal). Hence, Nepal's relative size fell by 6.8 times vis-à-vis China and 1.8 times vis-à-vis India. It is not unusual (rather common) for a developed country to lose its share in the world GDP as many developing economies grow faster than developed one. But in Nepal's case it is losing its share vis-à-vis the world and at an alarming rate relative to its neighbours.

In terms of population, Nepal's share compared to China increased from 1.4% to 2% between 1972 and 2012 (as Nepal's population growth rate was higher than that of China), whereas it remained more or less the same at 2.2% with India. Population wise, China is 49 times and India is 45 times bigger than Nepal.

As a result of the difference in growth performance over the decades between Nepal and its neighbours, comparing per capita income of a Nepali with that of a Chinese or an Indian has been increasingly a laughing stuff. Not long ago, per capita income of a Nepali was higher than that of a Chinese and very close to that of an Indian. Nepal's GDP per capita which was 1.2 times of China (20% higher than that of China) in 1972 has fallen to 0.12% of China in 2012 (Figure 2). Today, Chinese per capita income at $3,348 (at 2005 constant US$) is 8-times higher

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2 That happens because developing countries can grow faster because of unused resources (labor and capital) whereas it is hard to obtain more than 2-3% per capita GDP growth in developed countries as most of the resources are already fully and efficiently utilized.

3 GDP per capita growth rate is obtained by deducting population growth rate from GDP growth rate, and it is a better measure of comparing the economic efficiencies across countries than GDP growth rates which may differ simply because of population growth differences. Growth rates are always computed in constant price measure so that the inflation differences across time in a given countries and across countries is taken out. Furthermore, for cross countries level comparison, it is better to use data on purchasing power parity (which takes care of living cost differences), but for the growth rate it does not make big difference between using constant dollar or PPP GDP.
than of Nepalese ($400). Simply put, on average, income of a Chinese is equal to the income of eight Nepalese. Compared to India's, per capita income of a Nepali was 70% in 1972 and fell to 36% in 2012. One Indian earns equal to almost that of three Nepalese. In the course of last 40 years, China’s per capita income doubled four and half times, India's doubled more than twice and Nepal's doubled just once (in 38 years). In more recent years, China's per capita income has doubled in every seven years and India's has doubled in every 12 years. Comparing the last three sets of bars in 2012 in Figure 2 with those in year 1972 and 1992, one can see how the relative economic situation of a Nepali is shrinking year after year compared to its neighbours.

3. Parties’ Economic Growth Agenda

The need for higher economic growth in Nepal cannot be more urgent, and attaining it should be the prime concern of Nepalese policymakers. Idle and misused resources are lost opportunities for a country. Without growth even well intended redistributive policies that help create equality of opportunity cannot be implemented. To show how growth can be used for social and economic justice, we do one “what if exercise”. If Nepal’s growth rate had been that of China in the last decade (2003-2012), Nepalese would have been 56% richer, as average annual GDP would have increased from US$9 billion to US$14 billion. Furthermore, even with the existing tax rates, government would have been able to double its expenditure in education and health. Put differently, it would have been able to provide education and health services to more than double the population than it actually did.4

With this background, I now visit the parties’ growth agenda. Among the three parties, UCP’s platform is more elaborate which has put economic growth targets for the next 40 years, staged for different duration: (i) 7.9% for the next 5 years, (ii) 11% for next 10 years (iii) 12.4% for next 20 years and (iv) 12.2% for the next 40 years. I have reported UPC's target and my stepwise calculation in Table 1. The first column shows four cumulative durations that the targets are made, and using 2014 as initial year of implementation, in column 2, sub-periods for these targets are reported. For example, the UCP’s target for the next five years mean during the

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4 In 2003, Nepal's GDP (2005 constant US$) was US$7.5 billion and it increased to US$11 billion in 2012. If we apply Chinese GDP growth rate during this decade, Nepal's GDP in 2012 would have been US$21.3 billion. So, average annual GDP (in the period 2003-2012) would have been US$14 billion instead of actual US$9 billion. Using the existing tax rates (which was on average about 11% of GDP), Nepal would have been able to collect additional revenue of US$550 million (0.11xUS$5 B) or annual US$55 million (actual annual tax collection was about US$1B). During this period, annual education and health expenditure was US$56 million.
period of 2014-2019 and the next 10 years mean during 2019-2024 and so on. In column (3), I list UCP’s targets, listed in page 23 (table 1) of their Platform.

Since the targets (in 3) overlap in the sense that for the first five years it is annual 7.9% and for the first 10 years it is 11%, the growth rates between 5 to 10 years has to be higher than 11% to maintain annual growth rate of 11% for 10 years. The same line of reasoning applies for growth targets of other years as well. In column (4), I report the actual growth rates required for each sub-period so that on average the growth rate targeted in column (3) is achieved. Even though the UCP’s Platform reports only per capita income to be achieved but not the per capita income growth rates, I have calculated the latter in column (5) using annual population growth rate of 1.25% (from 2001 to 2011, Nepal’s annual population growth rate was 1.35%).

Table 1. UCP's targets for economic growth

<table>
<thead>
<tr>
<th>Cumulative years from now (1)</th>
<th>Sub-periods taking 2014 as initial year (2)</th>
<th>UCP's target for income growth (%) (3)</th>
<th>Required income growth rate for each period (4)</th>
<th>Per capita income growth rate (5)</th>
<th>Per capita income at the end of the period (in US $) (6)</th>
<th>My calculation (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>History</td>
<td>2004-2013</td>
<td>4.4</td>
<td>4.4</td>
<td>3.0</td>
<td>721</td>
<td>721</td>
</tr>
<tr>
<td>5</td>
<td>2014-2019</td>
<td>7.9</td>
<td>7.9</td>
<td>6.7</td>
<td>1,400</td>
<td>997</td>
</tr>
<tr>
<td>10</td>
<td>2019-2024</td>
<td>11.0</td>
<td>14.0</td>
<td>12.8</td>
<td>3,300</td>
<td>1,821</td>
</tr>
<tr>
<td>20</td>
<td>2024-2034</td>
<td>12.4</td>
<td>13.8</td>
<td>12.6</td>
<td>10,700</td>
<td>5,966</td>
</tr>
<tr>
<td>40</td>
<td>2034-2054</td>
<td>12.2</td>
<td>12.0</td>
<td>10.8</td>
<td>40,000</td>
<td>46,396</td>
</tr>
</tbody>
</table>

Source: Based on UCP, 2013

Taking per capita Nepali income of US$ 721 (at current price), UCP calculates what targets realization would mean in column (6), with per capita income of US$ 40,000 at the end of 40 years. Using column 5, I also compute what the income would be at the end of each period in column (7). My calculation is different from that of UCP (for 20-year their calculation is almost double); my suspicion is that they have made an error. In any case the center message of this paper is relevant whichever series one follows.

Next, I turn to the Platform of Nepali Congress party which outlines its growth targets in the following two points (page 27):

- *In the next five years, the average annual per capita income will be raised to one lakh* Nepalese rupee (Rs 100,000 - hundred thousand)

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5 For example, to have annual growth rate of 11% in the first ten years (given that for the first five years the economy will grow by 7.9%), the growth rate between five and 10 years has to be 14%.

6 Since the table in their program is not detail and only provide what is in row (3) and row (6), it is hard to figure how they got the numbers in row (6).
• **Annual economic growth rate of between 8 to 10 percents will be achieved. In the next 20 years (emphasis, mine), Nepal will enter the upper middle income country.**

It is not easy what these targets mean; they need to be disentangled. In 2012, Nepal's GDP per capita at current price was Rs 62,500. Using average annual growth rate of the last ten years, which was 12% (at current price), this figure will increase to Rs 70,000 in 2013. To make it one lakh Rs in today's price—as targeted by Nepali Congress—by the end of next five years— in 2019, per capita GDP has to increase annually by 7.4%, slightly higher than that of UCP%.  

What about its long term, 20 years, goal? The document does not provide any target for income level in 20 years but claims that Nepal would be a member of upper-middle income group. Using the World Bank definition, it happens to be the case that the end of next 20 years (1914-2034), in 2034, the income range for upper-middle income—that the congress wants Nepal to be—will be $5,800 - $17,900. In 2013, Nepal's GDP per capita (in current price) is about $721. So to increase this amount to the minimum amount required to be in upper-middle of $5,800, the per capita income has to increase at an annual compound growth rate of 11%. As NC program implies that in the first five years, growth rate will be at 7.4% (as calculated above) the growth rate in the next 15 years should be higher than 11% and that works out at 12.2%.

Turning now to UML's manifesto, in page 29, it mentions the following:

• **In the next five years, Nepal will be promoted from least developed countries to a developing country.**

There is no clear workable definition of developing countries based on income range, but since Nepal is on the last category of four divisions by the World Bank, what they mean would be to move it to the next category, that is lower middle income group. Using same logic of adjusting the thresholds based on the inflation of the four major countries/groups, the minimum thresholds for upper middle income will increase from $1,051 to $1,114 in the next five years.

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7 The document is not clear about whether it is targeting GDP per capita, GNI per capita or GNDI per capita. For definition of all these look at Appendix B. The results would not vary much under GDP and GNI, as these two series are very similar.

8 World Bank, based on GNI per capita, divides countries in the world into four groups. Based on 2012 GNI per capita, they are: (i) low income, $1,035 or less (ii) lower middle income, $1,036 - $4,085 (iii) upper middle income, $4,086 - $12,615, and (iv) high income, $12,616 or more. The World Bank updates the income ranges for these groups each year by the amount of the average inflation in the US, Japan, the UK and the Euro Zone so that the range remains the same in real terms. To find out what would be the minimum income for upper-middle group by the end of next 20 years, I use these countries' inflation in the last 20 years. Compared to 1993 (20 years ago) the income range of these groups increased annually by 2.4% (as that was the inflation rate in these countries). Using slightly less, 2% annual, inflation rate for the next 20 years, I reach to this amount. The other three thresholds are: $1,470 or less for low; $1,471-$5,800 for lower middle and higher than $17,900 for high income.
Taking Nepal's per capita income of $721 in 2013, to reach $1,114 by the end of five years (2019), Nepal's GDP per capita has to increase by 9.1% annually.\(^9\)

The targeted growth rates that I have computed for all three parties are presented in Table (2). The first row shows that in the last decade, average annual per capital income growth rate was only 2.9%, whereas the parties want to expedite the growth rates by more than double in the first five years (UCP and NC) and three-times in case of UML. In the next ten, 20 years, UCP and NC target to quadruple the growth rates compared to what is historically achieved. From its very high first five years targets, one could guess that had UML strived for longer term targets, it would probably be at least in par with those of UCP and NC.

**Table 2. Average annual per capita income growth targets**

<table>
<thead>
<tr>
<th>Sub-periods</th>
<th>Year coverage taking 2014 as initial year</th>
<th>UCPN</th>
<th>NC</th>
<th>UML</th>
</tr>
</thead>
<tbody>
<tr>
<td>History</td>
<td>2003-2012</td>
<td>2.9</td>
<td>2.9</td>
<td>2.9</td>
</tr>
<tr>
<td>First 5 years</td>
<td>2014-2019</td>
<td>6.7</td>
<td>7.4</td>
<td>9.1</td>
</tr>
<tr>
<td>Next 5 years</td>
<td>2019-2024</td>
<td>12.8</td>
<td>12.2</td>
<td>na</td>
</tr>
<tr>
<td>Next 10 years</td>
<td>2024-2034</td>
<td>12.6</td>
<td>12.2</td>
<td>na</td>
</tr>
<tr>
<td>Next 20</td>
<td>2034-2054</td>
<td>10.8</td>
<td>na</td>
<td>na</td>
</tr>
</tbody>
</table>

Source: Based on UCP, 2013, NC, 2013 and UML, 2013; na: not applicable as there are no growth targets made

4. *World Growth Frontier and Nepal: Through the Lenses of History*

Are these targets realistic, or are they just high numbers (copied from China's achievement) picked by insincere politicians? I intend to answer this question by comparing these targets with world growth history. For that, I compute the decade-wise annual per capita GDP growth rate, between 1961 and 2012, of all countries in the world and select countries for each decade that had attained the highest average growth rate for the decade. The countries that have led the per capita GDP growth rates are Japan in the 1960s (1961-1970); Singapore and Hong Kong in the 70s, Korea and China in the

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\(^9\) Note that we are using lower annual inflation rate of 1.2% (as was the case in the last five years) instead of 2% that we use for the next 20 years. Last five years had unusually low inflation due to recession. Had I used 2% growth rate, UML target means that the annual growth rate must be 11%.
80s, China for the next two decades and also for 2011 and 2012. Using these decade-wide globally highest growth rates, I construct “world-growth frontier” as a step-wide line in Figure 3, which, given the state of the technology, shows the limit of attainable growth rates. The highest level of annual per capita growth achieved was in the last decade (2001-2010) and it was by China at 9.9% (10% still remains too high to realize). As countries achieve a certain level of GDP per capita, resources are more or less fully utilized (people are not unemployed and capital is fully utilized), they cannot attain higher growth as seen by low per capita growth rate in the US (see Krugman, 1994, for the account of US growth). Almost like a rule, developing countries develop a lot faster than the developed ones. But Nepal is not one of those. So far, Nepal's decade-wise annual highest per capita growth rate has been 2.4% (even lower than in developed countries). Nepal is an exceptional laggard, whose distance from the frontier is incredibly high at 7 percentage-points. This is the reason, why Nepal's relative position vis-à-vis China and India (seen above) is shrinking rapidly.

Now I combine the growth targets made by the three political parties (the future) with world growth frontier (the past) in Figure 4. The lines “Nepal's 40 years history” and “world growth frontier” are from the previous chart (for the period 1972 to 2012). Then there are three other lines, each showing target growth rates of each of the three parties. As UML has targets for only five years, the line extends to five years only, and they have the highest target among three parties. The NC's five-year target coincides with that of world growth frontier and target for the next 15 years a way higher (given by step-up line). For the first five years, UCP growth target is the lowest, then they have another (higher) growth target for next five years, another rate for next 10 years and finally for the next 20 years (all given by their step-wide line). Overall, it can be said that the parties are very much similar in their growth targets. Therefore, instead of following each party separately, I will combine longer term growth targets of UCP and NC for further discussion.

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10 Even though there were other countries especially the oil producing countries that grew fastest for a year or for few years, but their growth was not sustained for a decade period of time.
The difference between party’s target growth line and world-growth-frontier is as high as 5%, given by distance $bc$. The difference between “world-growth-frontier” and “Nepal’s 40 years history” line measures Nepal’s laggardness from the world growth frontier in the last 40 years, given by the measure $ab$. The rates given by vertical distance $ac$ is the additional growth rate that Nepal has to achieve (more than its historical record) for parties’ claim to be fulfilled. The average growth pace that Nepal has to increase annually to realize the parties’ targets ranges from the lowest 8% to as high as 12% for some years.

It's simply not possible. Either the parties have no idea what it takes to increase growth rates even by 1-2% on a sustained basis or they have complete lack of sincerity. A reading of the parties' platforms forces one to conclude that it is both. They have lack of understanding how the basic economics work and my doubts are that they have translated China's growth rates as Nepal's targets. In countries where economists scrutinize parties’ promises, these numbers would have been considered irresponsible and bogus but in Nepal parties get away by claiming these targets as their “vision” and themselves as “champions of growth”.

Using UCP's target growth rates (which can be considered representative of all three parties), I plot the would be per capita income for the next 20 years in Figure 5, which is shown by sky-rocketing line. According to this, per capita income will increase from US$721 in 2013 to to US$5,913 in 2034 (in constant price of 2013). The line at the bottom shows that, if Nepal continues to grow at the same rate as it did in the last 20 years, per capita income in 2034 will be only $1,159.\(^\text{11}\) Mind the difference between two series: if past 20 years mirrors the next 20 years, Nepal’s per capita income will be only 60% higher in 2034 compared to 2013, taking 30 years to double the income. However, if we believe

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\(^{11}\) I have computed the figure as follows. I took Nepal’s GDP per capita in constant 2005 US$ from 1994 to 2013 and converted that series into 2013 price. For example, in 2013, Nepal’s GDP per capita in 2005 US$ is about 404 and in current price is about $721. Using this $721 for 2013, we use the growth rate of 2.4% that Nepal has achieved in constant US$ GDP per capita from 1994 to 2013. Using this growth rate, we compute what Nepal’s per capita GDP would be in 2054.
the parties’ target, then income in 2034 will be 720% higher than in 2014, a doubling of per capita income for more than 3 times in 20 years (with average doubling period of 6 years). No country in the world has been able to double per capita income in 6 years. The shortest time taken to double per capita income is by China in the last decade which took about 8 years. For the most of the last 20 years that Nepal's per capita income grew only by 2.4%, NC—the party that is making this target—was the one to rule Nepal. Will this time be different?

5. A Theoretical Framework for Economic Growth

Before analysing whether parties have developed concrete programs to attain this goal, I present a framework for a country’s economic growth. GDP per capita growth (GDPPC) that the parties have targeted is an outcome of country's endowment, and economic and social policies that it pursues and can be decomposed into three major components (inputs):

\[
(1) \quad \frac{GDP}{Population(N)} = \frac{Working\ age\ population\ (W)}{Population\ (N)} \times \frac{Employed\ (L)}{W} \times \frac{GDP}{L}
\]

The right-hand side is just the extension of the left-hand side (GDPPC); cancelling terms on the RHS yields the LHS. The three components on the RHS can be called, respectively, (i) rate of working age population (ii) employment rate—share of employed in total working age population and (iii) labor productivity—production per labor employed \((L)\).\(^{12}\) A country's GDPPC will be higher when any of these components is higher.\(^{13}\) The GDPPC growth rate increases only if these components grow faster (or at least one of them grows faster whereas others remain constant). The increase in the first two components on the RHS, collectively called employment intensity, is the increase in input use. On the contrary, the last component, labor productivity, increases output not by increased use of labor, but by more efficient use of existing labor. Increase in labor productivity growth is the only lasting way of increasing GDPPC, as a nation cannot increase the use of labor indefinitely. As derived in Appendix A, labor productivity depends on many factors as given below.

---

\(^{12}\) Alternatively, the last component, labor productivity per employed can be further extended to labor productivity per hour by replacing GDP/L by H/L × GDP/H, where H is number of hours worked.

\(^{13}\) Working-age population is the number of people of age 15 and above. People in working age can be decomposed into (i) labor force and (ii) not in labor force. People not in labor force are: (i) people unable to work due to disability and sickness (ii) stay-at-home parents (iii) discouraged unemployed who no longer seek work (vi) retired people (vii) adults in full time education, and people in prisons. Labor force can be either employed or unemployed. Employment rate is percentage of working age population that is employed and unemployment rate is number of unemployed persons as percentage of labor force.
(2) \[ \ln(y_t) = \beta_k \ln(k_t) + \beta_h \ln(h_t) + f \left[ \ln(\text{trade + economic policy + institutions}) \right] + \ln(\text{infrastructure}) + \text{ideas} \]

where \( y_t = \frac{\text{GDP}_t}{L_t} \) is GDP per worker; \( k_t = \frac{K_t}{L_t} \) is capital per worker and \( h_t = \frac{H_t}{L_t} \) is human capital per worker (measured as share of educated worker or average years of schooling of workers). According to equation (2), labor productivity depends on per person physical capital, per person human capital, international trade, economic policies, institutions, infrastructure and the last term, ideas, which can also be called technological progress.\(^{14}\) The major economic policies that affect labor productivity are: monetary policy mainly related to inflation rate, government fiscal—tax and expenditure—policies, and financial system. Financial systems, including private credit play a key role in the growth process because it is key to the provision of funding for capital accumulation and the diffusion of new technologies. Institutions—in a nutshell, a rule of game—in a country includes factors such as regulations, rule of law, business climate, property rights, labor market rule etc. Business climate—the easiness of doing business—is negatively affected by factors such as corruption, red-tape, nepotism, poor infrastructure and lengthy bureaucratic process.

Except the first two inputs (physical and human capital) in equation (2), the other variables are nonrival in nature (use by one does not preclude the possibility of use by others). In that sense, these inputs contrast sharply with capital or labor as adding new machine benefits one producer whereas adding new idea or having better institution benefits everyone regardless of the size of the economy. As a result, income per capita depends on the total number of ideas, not on ideas per person. This nonrival nature leads to increasing returns to scale (declining per unit cost with output) in production (Romer, 1990). In this set up, the stock of ideas is proportional to the number of researchers. One implication of this model is that as China and India have started producing massive number of researchers, there is a potential of generating more ideas and advancing technology faster that would benefit to the world.

Taking derivatives with respect to time, equation (2) in level can be written in growth form:

\[
\left( \frac{\partial y_t}{\partial t} \right) = \beta_k \left( \frac{\partial k_t}{\partial t} \right) + \beta_h \left( \frac{\partial h_t}{\partial t} \right) + \Delta \text{trade} + \Delta \text{economic policy} + \Delta \text{institutions} + \Delta \text{infrastructure} + \Delta \text{ideas}
\]

\(^{14}\)Instead of using GDP, I could have used gross output (GDP plus intermediate inputs) on the LHS, and added intermediate input as other determinants on the RHS. However, since we are talking about income growth, intermediate inputs are netted out as the value of intermediate inputs is embedded in final output—the GDP measures—in the same way the price of bread includes the price of wheat that is used for making bread.
where variable with dot means growth such that \( \dot{x}_i = \frac{d \log x_i}{dt} = \frac{dx_i}{dt} \frac{1}{x_i} \) and \( \Delta \) also indicates the same, the change over time. It is possible that the factors such as, trade, economic policies, institutions and infrastructure not only affect growth directly as in equation (3) but may also affect the physical capital and human capital thereby affecting labor productivity growth through them indirectly (for discussion on this, see OECD, 2003).\(^{15}\)

Finally, the last component, ideas or technical progress—either introduction of new products or reduction in the production costs of existing product—may come from both deliberate attempt on the part of economic agents and “Manna from Heaven”.\(^{16}\) Ideas that is generated by investment in research and development (R&D) and other innovative activities by economic agents is the paid, the first, part. The second, unpaid part, occurs as economic agents learn from others’ technology. This is called technological spillover (one benefitting from others without paying) or positive externality. Research shows that how much a country is capable of absorbing technological spillover depends on the stock of ideas at home (R&D, higher education, and other innovative activities). It could also come through international trade (as firms learn from participating in foreign markets) and from foreign R&D and foreign investment (see Acharya and Keller 2009 on how the first two factors help benefit a country). Therefore,

\[ \text{Technological spillover} = F[\text{ideas at home; ideas in foreign; trade; FDI}] \]

\(^{15}\) Here I adopt the endogenous growth framework, but a brief discussion to earlier growth models will be useful. In the early 1960s, Harrod-Domar showed that output growth depended on only two things: the rate of investment and capital to output ratio. Then came Solow (1976) model, Neo-classical theory of economic growth, which states that growth comes from more capital and labor but also from ideas and new technology. It states that a sustained rise in capital investment increases the growth rate only temporarily, because the capital-labor ratio goes up. However, the marginal product of additional capital may decline due to diminishing returns and thus an economy moves back to a long term growth path, with real GDP growing at the same rate as the growth of the labor plus a productivity improvement. At the long run steady state growth path, output, capital, and labor are all growing at the same rate, so output per worker and capital per worker are constant. In this model, to increase the long run growth rate, an increase in labor supply and also a higher level technological change is required. The rate of technological change is exogenous—in a sense that it is assumed to be independent of the investment and other factors. On the contrary, endogenous growth models (see Romer, 1990 and Jones, 1995) state that improvements in technology is brought by deliberate attempt of individual and government actions such as investment in human capital, and R&D etc as outlined in the equation above. So this theory proposes the need of government and private sectors to nurture innovation and provide incentives for individuals and businesses to be inventive.

\(^{16}\) A closely related concept in economics is total or multiple factor productivity (TFP or MFP) growth. Besides technical change or change in ideas, the TFP could increase due to organizational and institutional changes, shifts in societal attitudes, market competition, inspirations, ingenuity, and many other factors (see Hulten 2001 for TFP and Acharya and Keller 2009 on how trade affects TFP).
The higher the value of the LHS variables, the higher will be the capacity of a country to tap the cost-free world knowledge to enhance its productive capacities.

The labor productivity in equation (2) is derived using an aggregate production function for the whole economy, a sum of economic activities taken by millions of economic agents at personal, household, company (firm) and government levels within the country. So GDP growth rate depends on how each agent or each sector in the economy contributes. The role of the government is not to be involved in production but to establish a market framework such that all citizens have equal opportunity to advance and contribute to economic prosperity and all factors of productions are engaged efficiently. Government’s role is to correct any hindrances to well-functioning of the market.

6. Connecting Theoretical Framework with the Data and the Policies
The GDP per capita growth targets that parties are aiming for are the outcome (ends) whereas inputs (means) for this are the factors listed on the RHS of equations (1), (2) and (4). Only the factors on the RHS of these equations determine a country’s growth pace. So, to achieve the targeted growth, the parties should aim policies that affect variables on the RHS. All three parties’ Platforms are full of output targets in each sector (agriculture, industry, tourism, transports, school, hospitals, you name it) but lack a framework on how these targets will be achieved.\textsuperscript{17} Understandably, election platforms are not the documents to develop such plan in details, but these parties have never ever thought of a roadmap for economic growth and it reflects in their inconsistent Platforms. The plethora of programs that the parties are promising sounds complete hollow if one sincerely does the costing. The actual revenue of the government would not be even a small fraction of the “needed revenue”, for the programs. The promises that cannot be backed by resources are illusions and show insincerity in the part of parties, to say the least. Moreover, on a more fundamental level, even if the parties’ programs are implemented, will they address the growth problems? I turn to this discussion next by identifying major impediments to the determinants of growth—the RHS factors in equations (1) and (2)—and comparing whether parties’ programs are any indication of correct identifications of them.

\textsuperscript{17} Take an example. NC under “Agriculture and Land Reform” (programs 5.3) list 20 programs and does the same on “Education”. Similarly, under “Tourism and Industry”, UCP has 18 programs. Under “Democracy, Good Governance and Justice”, UML has 20 programs. All sectors are filled with full of such numerous programs in all three parties’ Platforms.
6. A. Labor employment intensity: Scary tale of youth exodus

Starting with the first two components on the RHS of equation (1), I compare Nepal's situation with that of China and India (Table 3). The data raise some interesting and also serious issues. First, Nepal's working age population at 64%, compared to the situation in China (82%) and India (70%), is very low. As a result of lower value of the first component in equation 1, everything else being the same, Nepal's GDP level would be lower than that of its neighbours. The upside is that, if trained properly, Nepal would have advantage of younger population premium (allowing it to achieve higher growth) in the future. Second, somewhat surprisingly, among those in working age population, 84% are in labor force in Nepal, way higher than in India (56%) and China (74%). The most likely reasons of this difference are that Nepal has smaller proportion of students and shorter schooling age. Both these factors will reduce Nepal’s growth in the future.

Based on Nepal’s Labor Force Survey 2008 when adjusted with all types of underutilization the unemployment rate in Nepal is about 22% (Table 3). As shown on the right part of the table, among employed, only 17% were paid workers and 83% were self-employed. Among paid workers, 17% of all paid employee were working in the government. Very small numbers of people were working in corporations which are supposed to be the job creators.

<table>
<thead>
<tr>
<th>Table 3. Labor market characteristics (percent of labor force)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full time employed</strong></td>
</tr>
<tr>
<td><strong>Unemployed (under utilization factored)</strong></td>
</tr>
<tr>
<td><strong>Loss of jobs due to involuntary part time</strong></td>
</tr>
<tr>
<td><strong>Loss of jobs due to other underutilization</strong></td>
</tr>
<tr>
<td><strong>Unemployment</strong></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>


Using Okun’s law—a rule of thumb that shows trade-off between fall in unemployment and increase in output—we can calculate how much output would increase if unemployment rate were eliminated. Taking average of the results in developing countries—a 1 percentage-point decrease in unemployment leading to 1-1.5% increase in output—this would increase output by 20-30%. In this context, the policy should focus on the following issues.

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Footnote 18: There were about 32% of employed people who were working less than 40 hours. Among them, 18% were either completely involuntary, or ill or unpaid student in training. As the average hours of work of these people was about 20 hours, the adjusted loss of jobs was half of 18% (9%). Furthermore, among all employed and partly employed there were another forms of underutilization especially inadequate earning and skill mismatch. They constituted 21% of all employed and adjusting half of it as loss in employment, we have 10.7%. And 2.1% were complete unemployed. The sum of all these three yields 21.7% as unemployment rate (when adjusted with all types of underutilization).
Issue 1: Unemployment is a major drag on growth. As population in Nepal is increasing at an annual rate of 1.35%, the number of people that enter job markets each year is about 360 thousands (1.35% of total 26.5 million population), about 2.5% of the labor force. Adding the existing unemployed (at 22%) to this new entrance, Nepal needs to create jobs for 4.8 million people (which is about three-times the number of people working in manufacturing sector now) to eliminate unemployment in the next five years, which the parties aim to do. Creating jobs at that level, however, is an extremely tall order, and the parties provide no specific actions on how they are going to do that.

Issue 2: Nepal has turned from a supplier of mercenary soldiers to a supplier of workers in merciless foreign land. Almost one quarter of youth and half of Nepal’s male youth of age 20-39 has left Nepal to work as unskilled labor in foreign countries. In Table 4, I report the number of population by three groups (column headings), all ages, ages within 20-39 and ages 20-49 (total, male and female for each age group). The first row reports the number of total population. The second row shows the number of absent population; in 2011 as counted by population census, total of 1.92 million people were out of Nepal. So, the share of population who is absent from Nepal was 7.3% (last row), with 13% in male. However, even though we do not know the age distribution of absent population we know that they are relatively young. If all absentee are of the ages 20-39, one-quarter of both youth and almost half of male (48.5%) of these ages are out of Nepal. If we consider that the absent population is of the ages of 20-49, the share of male that is absent from Nepal is 36%.

<table>
<thead>
<tr>
<th>Population (in mil.)</th>
<th>All ages</th>
<th>Age 20-39</th>
<th>Age 20-49</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>26.49</td>
<td>7.78</td>
<td>10.34</td>
</tr>
<tr>
<td>Male</td>
<td>12.85</td>
<td>3.47</td>
<td>4.71</td>
</tr>
<tr>
<td>Female</td>
<td>13.65</td>
<td>4.31</td>
<td>5.63</td>
</tr>
<tr>
<td>Absent population</td>
<td>1.92</td>
<td>-</td>
<td>18.6</td>
</tr>
<tr>
<td>Total</td>
<td>24.7</td>
<td>48.5</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>13.1</td>
<td>35.8</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.7</td>
<td>4.2</td>
<td></td>
</tr>
<tr>
<td>Percent of absent population</td>
<td>7.3</td>
<td>24.7</td>
<td>18.6</td>
</tr>
</tbody>
</table>


The more people migrate to earn bread and butter to other countries as unskilled labor, the more catastrophic failure the nation is waiting for. There is unimaginable level of costs of temporary migration, ranging from accidental death in foreign countries, to psychological stress,

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We know that this number underestimates the number of people that are absent, for example, if the whole family is out of Nepal, then there would not be any body left to report as this whole household is absent in the census. Similarly, in several cases, the movement back and forth to India is not clearly reported.
family breakdown, and hardships for children and elderly. Research show that, everything else being the same, children in a household without father, do worse in education compared to children with their fathers at home. It could be an irony that most of the Nepalese who have migrated to earn tuition fee for their children in private schools might have hampered rather than helped their children’s education in the long term. The short term “warmth” of remittances will bring long term chill both in economic and social aspects.

The main reasons for this alarming exodus are economic deprivation, education and health costs imposed by wrong government policies, no rule of law and no hope of making a living inside the country. Temporary migration will be poverty trap which is neither temporary nor a short stop on the way to greater economic opportunity. How the parties want to stop this painful journey? No way. They will, rather, exacerbate the process by continuing the same policies that have caused the exodus in the first place. Does this ever increasing flow of migrants to merciless countries make Nepalese think of their role as mercenary soldiers somewhat solacing, as it is not that pervasive and low paid?

6. B. Investment: low and mired with policy-misguidance

Now I turn the discussion on factors affecting labor productivity in equation (2). I will cover all other factors except economic policy which I do not cover explicitly for two reasons. First, the fiscal policy part of it is covered in discussion of other factors. Second, as Nepal has fixed exchange rate regime, tied with Indian currency, full discussion of inflation rate and financial system will require examining whether Nepal has right exchange rate regime, which is beyond the scope of this paper.

Start with investment, whose accumulation over time is physical capital stock (after taking care of depreciation). Investment is required to buy plants and equipment, to convert new ideas into produced goods and services, to launch new products to markets and to reduce cost of production (by adopting capital intensive technology). In a simplest form it can be shown that that economic growth depends on investment rate (investment as a share of GDP), adjusted (divided) by incremental capital output ratio (ICOR), which measures how many units of additional capital are required to yield a unit of additional output. Studies based on reasonably growing and developed economies, ICOR is considered to be in the range of 2 to 5. In order to
achieve 10% growth that the parties have aimed, assuming ICOR = 5, we need investment to GDP share of 50%. If ICOR is higher we need even more investment rate.

Leaving aside for the moment whether more investment would necessarily means higher growth, the question is how to finance such a large rate of investment. Investment in a country has to be financed either by domestic savings for from borrowing abroad. As derived in Appendix B, national account identity of a country has to satisfy that

$$I = S^D - TB$$

where $S^D$ is domestic saving, and TB is trade balance (the difference between exports and imports of goods and services). Among these three variables, it is not the case that one determines the other; they are determined by different set of variables but the identity should hold all the time.\(^\text{20}\) If any change occurs in the determinants of one of these variables, the underlying variable changes and there should be changes in other two variables to keep the identity intact.

In Figure 6, I report savings and investment rates for growth-lead countries (top two lines) and Nepal (bottom two lines). The solid lines are for investment and the dashed lines are for domestic savings. Few things are noticeable. First, for all growth-lead countries both investment and domestic saving rates were very high, often savings exceeding investment (implying trade surplus). Second, as the GDP per capita growth was step-wise upward in every subsequent decade, shown in Figure (3), so were investment and domestic savings rates. Third, Nepal's domestic saving is way lower than its investment which in turn is quite lower compared to that of growth-led countries, with a jump (surprise!) recently. This huge and widening gap is nothing but trade deficits (23% of GDP). In Nepal’s case as remittances and to

\(^{20}\) Domestic saving depends, generally, on country's fiscal policies, such as government expenditure and taxes; investment depends on real interest rate (more or less in world real interest rate or Indian real interest rate in case of Nepal because of fixed exchange rate regime with India) and TB, among other factors, depends on real exchange rate (nominal exchange rate adjusted for inflation in trading countries).
some extent foreign aid are large inflows, it will be useful to write equation (5) slightly differently (as derived in the Appendix).

(6) \[ I = S^D + NFIA + NUT - CA \]

where NFIA is net factor income abroad; NUT is net unilateral transfers which includes (i) remittances and (ii) foreign aid; CA (current account) = TB + NFIA + NUT. Further simplifying, (7) \[ I = S^N - CA \]

where \( S^N \) is national savings.21 For many countries, domestic and national savings are not much different but in Nepal's case even though NFIA is negligible, \( S^N \) is far greater than \( S^D \) because of large flows of remittances and also foreign aid. Equation (7) states that a country’s investment has to be financed by either national savings or borrowing from abroad (negative CA). As shown in Appendix B, - CA = FA (financial account). If CA is negative, FA must be positive, meaning that the country should be receiving foreign direct investment or loan from abroad to finance its CA deficit. Alternatively, as domestic savings equal private savings plus government savings, equation (6) can also be written as (see Appendix B)

(8) \[ I = S^D_p + S_c + NFIA + NUT - CA \]

where \( S^D_p \) is private domestic saving and \( S_c \) is government savings (positive if budget is in surplus and negative if budget is in deficits). I report how these different components were contributing to Nepal’s investment in the last seven years (2005-2011), along with that of China and India (Table 5). Domestic saving in Nepal is five-times lower than in India and eight-times lower than in China. It has been financed by huge trade deficits (column 7) whereas India has small trade deficits and China has surplus. National savings is lot higher than domestic savings and also higher than investment, creating surplus in CA (column 8) and the mirror image is FA reported in columns (9).22 What is striking is that even that low level of investment in Nepal would not have been possible, had there been no remittances (which represents 90% of NUT).

How do parties intend to finance the investment required for growth? Unfortunately, there is not much one could get by reading the Platforms. To be fair, it is only UCP which has

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21 Using equation (6) and (7), we have \( S^N = S^D + NFIA + NUT \). However, \( S^N \) and \( S^D \) cannot be decomposed in such a clear cut manner because some or all part of NFIA and NUT (remittances and foreign aid) can and will be used for consumption (not saving). In that case, NUT flows will affect trade balance (by lowering exports and increasing imports) which in turn would lower \( S^D \) than what it would have been had there been no remittances and foreign aid. Therefore, in the presence of remittances and foreign aid, domestic savings will be underestimated.

22 China is buying foreign assets by keeping its financial account negative to maintain its current account surplus. They are accumulating foreign wealth, negative entry in column (9). Nepal is increasing its foreign reserve as well but not due to trade balance surplus but due to remittances.
produced at least a table showing how much investment is required and from where to mobilize. I do not think the table is derived using any rigorous approach that satisfy capital requirement linkages across detail sectors; it is just an arithmetic exercise using one ICOR value, but they have, at least, recognized the need for larger investment (it is a different issue that the UCP’s investment table is somewhat inconsistent). NC’s stand on investment is limited to one sentence which reads, “NC believes that investment climate can be prepared and annual growth rate of 8-10% can be achieved (page 33)”. There is no mention of what that investment climate is, how to create it and how much investment will be mobilized. UML is even blander; it does not bother to discuss about investment at all.

Table 5. Savings, investment, current and financial accounts, 2005-2011

<table>
<thead>
<tr>
<th></th>
<th>Investmen t (1)</th>
<th>Gross domestic savings (2)</th>
<th>Of which govern ment (3)</th>
<th>Of which private (4)</th>
<th>NUT (5)</th>
<th>Gross national savings (6)</th>
<th>Trade account (7)</th>
<th>Current account (8)</th>
<th>Financial account (9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nepal</td>
<td>26.8</td>
<td>6.1</td>
<td>-7.1</td>
<td>13.0</td>
<td>22.2</td>
<td>28.3</td>
<td>-20.7</td>
<td>1.5</td>
<td>-1.5</td>
</tr>
<tr>
<td>China</td>
<td>45.1</td>
<td>50.9</td>
<td>na</td>
<td>na</td>
<td>0.7</td>
<td>51.5</td>
<td>5.7</td>
<td>6.4</td>
<td>-6.4</td>
</tr>
<tr>
<td>India</td>
<td>36.1</td>
<td>31.6</td>
<td>na</td>
<td>na</td>
<td>2.5</td>
<td>34.1</td>
<td>-4.5</td>
<td>-1.9</td>
<td>+1.9</td>
</tr>
</tbody>
</table>


Column (1) = column (2) + column (7) as given by equation (4); column (2) = col. (3) + col. (4); Col. (6) = [col. (2) + col. (5)] = col. (1) + col. (8); col. (8) = [col. (5) + col. (7)] = -column (9)

In what follows, instead of commenting on a particular party's proposal, I discuss some pertinent issues related to investment which the parties have either ignored or not realized. To achieve higher economic growth, the parties need to tackle these issues head on.

Issue 1: Most of the government revenue is used for consumption and whatever is invested is mostly on state-owned enterprises that are chronic losers. Government expenditure accounts about 22% GDP in Nepal, and most of this expenditure is used for consumption purposes (Table 6). In 2011-2012, 20% of government expenditure was absorbed by wage and salary, a very high number by any country’s standard (an indication of bloated bureaucracy). Only 15% of total government expenditure was on capital expenditure item; even there 20% of it was used to buy share of state-owned enterprises (SOEs), and another 12% was provided as loan to SOEs. Hence,

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23 I have translated UCP’s investment plan in its Table 2 in the format of equation (8) and is available on request. There are two discrepancies in the UCP’s proposal. First, it maintains that there will be trade surplus in 20 years which is wrong as it violates the national account identity. In its projection, there is a positive gap between investment and national savings which should be reflected as negative CA exactly by the same amount. As CA = TB + NFIA + NUT, NFIA is treated as negligible and NUT is projected to be positive, CA can be negative if and only if TB is negative and larger than NUT in absolute value, that is, huge trade deficits, just opposite to UCP’s claim of positive TB. Second, they consider internal borrowing outside of the saving-investment identity which cannot be the case. Internal borrowing is part of domestic saving, (government negative saving) and must be part of the identity.
only 67% of what is allocated for capital expenditure or only 10% of total government expenditure is left for capital expenditure outside of SOEs. Government received only 6% nominal return to its share investment from these SOEs which is lot lower than the nominal interest rate of 10.5%, at least 4.5% annual loss. The return on overall capital investment in these SOEs has been negative 2% in 2011-2012. Data for the last 10 years show that the return in these SOEs has not been more than 1.1% annually (MOF, 2013c).

**Table 6. Public expenditure and state-owned enterprises, 2011-2012**

<table>
<thead>
<tr>
<th>Share of wages and salaries in govt. expenditure</th>
<th>Share of capital expenditure in govt expenditure</th>
<th>Share of investment in SOEs in capital expenditure</th>
<th>Share of loan to SOEs in capital expenditure</th>
<th>Return on share investment (%)</th>
<th>Overall return to investment in SOEs</th>
<th>Real interest rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>19.5</td>
<td>15.2</td>
<td>19.9</td>
<td>11.8</td>
<td>6.11</td>
<td>-2.1</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance, (1) 2013a, (2) 2013b (in Nepali) and (3) 2013c

The rationale for SOE typically comprises a mix of social, economic and strategic objectives such as industrial promotion, regional development, provision of public goods and the taming “natural” monopolies. Unless it is a natural monopoly case, as a general rule, government should not be in commercial business. It should let the market work by developing regulatory mechanism that balances between safeguarding the interests of the general public and allowing private capital to operate. And, even if SOEs are justifiable, they must be efficient. But in Nepal, not only it is hard to discern the rationales behind the SOEs, they have also been a big drain to the public resources. In 2012, there were 37 SOEs in six sectors and till 2012, government invested total of Nepalese rupee (Rs) 102 billion (7% of GDP) in share and similar amount, Rs 101 billion, was provided in loan (Table 7).

Most of this government largesse is poured in few big SOEs. A group of lead six SOEs (selecting a SOE in each sector that has the largest government investment) constitutes 69% of total government share investment and 94% of loan investment in all SOEs. Yet, more telling is the fact that 43% of government share investment and 74% of government loan investment is

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24 A natural monopoly is a single producer (monopolist) in an industry in which it is most efficient (involving the lowest long-run average cost) to concentrate production in a single firm as multi-firm production is more costly than production by a monopoly. It happens, generally, when the fixed cost of production is very high and the marginal cost is constant or does not rise sharply with production. Generally, public utility markets are such candidates. The solution is to either provide monopoly right to SOEs or regulate it so that private firms are allowed to operate but do not restrict output and charge higher price as monopolists often do. Because of inefficiency involved in SOEs, developed countries are shifting from SOEs to private regulated provision.

25 The majority foreign owned SOEs, which are 37 in number had total of about US$2.35 billion operating income (12% of GDP) in 2012, and half of it was from SOEs in trading sectors. They employed about 32 thousand people.
taken by a single SOE, the Nepal Electricity Authority (NEA), a monopolist in Nepal’s hydropower sector. As shown in Table (7), in a single year 2011-2012, the combined loss of NEA and Nepal Oil Corp was about Rs 20 billion, one-third of what government spent on entire education sector in that year. This is not the first time that these SOEs have incurred losses; they are bankrupt and are chronic losers in public purse. In the last ten years (that I was able to obtain the data), NEA was in loss throughout and NOC was in loss for nine years with meagre profit for a year. In 2012, NEA’s accumulated loss of Rs 27.2 billion was written-off by the government (which is Rs 5,000 per household in Nepal). We should not be surprised if the accumulated loss of Rs 24.8 billion of Nepal Oil Corporation is written-off any time soon. Moreover, NEA owes Rs 90 billion in principle and interest to the government with Rs 6 billion delinquent. Similarly, NOC owes Rs 8 billion to the government with Rs 7 billion delinquent.

**Table 7. Government involvement in SOEs, 2011-2012**

<table>
<thead>
<tr>
<th>Sectors</th>
<th># of SOEs</th>
<th>Sector lead SOE</th>
<th>Government share investment up to 2012, for all SOEs (for sector lead SOE)</th>
<th>Government loan investment up to 2012, for all SOEs (for sector lead SOE)</th>
<th>Profit/loss in 2011-2012, for all SOEs (for sector lead SOE)</th>
<th># of employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>7</td>
<td>UCIL</td>
<td>5.4 (3.7)</td>
<td>3.5 (2.2)</td>
<td>-1.26 (-0.36)</td>
<td>3,475</td>
</tr>
<tr>
<td>Trading</td>
<td>6</td>
<td>NOC</td>
<td>2.0 (0.3)</td>
<td>12.8 (12.6)</td>
<td>-9.77 (-9.53)</td>
<td>1,961</td>
</tr>
<tr>
<td>Services</td>
<td>7</td>
<td>NCAA</td>
<td>13.8 (13.2)</td>
<td>2.5 (2.1)</td>
<td>1.07 (1.10)</td>
<td>2,758</td>
</tr>
<tr>
<td>Social</td>
<td>5</td>
<td>NTV</td>
<td>2.3 (1.7)</td>
<td>0.2 (0)</td>
<td>-0.29 (-0.11)</td>
<td>1,869</td>
</tr>
<tr>
<td>Utilities</td>
<td>3</td>
<td>NEA</td>
<td>59.1 (44.0)</td>
<td>79.6 (75.0)</td>
<td>1.42 (-9.95)</td>
<td>15,278</td>
</tr>
<tr>
<td>Financial</td>
<td>9</td>
<td>ADBN</td>
<td>19.9 (8.1)</td>
<td>2.7 (2.7)</td>
<td>5.33 (1.84)</td>
<td>6,414</td>
</tr>
<tr>
<td><strong>All</strong></td>
<td><strong>37</strong></td>
<td></td>
<td><strong>102.4 (70.9)</strong></td>
<td><strong>101.2 (94.7)</strong></td>
<td><strong>-3.50 (-17.01)</strong></td>
<td><strong>31,755</strong></td>
</tr>
</tbody>
</table>

Sources: Ministry of Finance; (1) 2013b and (2) 2013c
UCIL: Udayapur Cement Industry Ltd; NOC: Nepal Oil Corp.; NCAA: Nepal Civil Aviation Authority; NTV: Nepal Television; NEA: Nepal Electricity Authority and ADB: Agriculture Development Bank, Nepal

In summary, there are four ways that these SOEs are draining public’s money. First, government invests in shares of SOEs and receives dividend substantially lower than interest rates. Second, government provides loan (on concessional rates) and it is not paid in time or not paid at all. Third, despite these goodies from the government, government writes-off their cumulative loss. Fourth, the SOEs charge higher price for general public than would have been the case had private markets been allowed to work with smart regulations in place. One wonders why the government cannot set effective regulation aiming to achieve the intended goal and leave most of these activities to markets rather than pouring public money to these inefficient SOEs. Why should the government be manufacturing cement, cigarette, and dairy, trading oil,
other goods and services and owning national construction company? It is needless to say that these subsidies to SOEs are widening income disparity in Nepal, making political class and their patronage as sole beneficiaries at the cost of general public. Would the parties make any dent on this misuse? If their Platforms are any guide, there is no chance. They will rather fight to get own party card-holders as CEOs.

**Issue 2: Most of private investment is made in wealth transfer (not wealth creation) and services duplication (not services expansion).** There are no hard data to support but the reality is that whatever the little private savings, they are mostly used to purchase land, homesteads and houses in urban area and to create basic education and hospital facilities. Arguably, the return to investment in these sectors is higher than in other sectors for the following reasons. First, compared to other sectors, land and houses have lower effective tax rates due to low property valuation and also lower tax rates. By comparison, in OECD countries the share of property tax in GDP is about 2%, with as high as 4% in UK, whereas in Nepal, it is only 0.001%. If property tax in Nepal is raised to 2% of GDP then revenue from this tax will be as much that from corporate income tax. The tax rate is similarly low for investment in education and health.

Second, these sectors are devoid of any meaningful regulation, leaving investors to rein in their own terms. Third, as investors of these sectors do not have to deal with government officials, labor groups and street gangs on a regular basis, the incidence of bribery, strikes and other rent-seeking activities are lower compared to in others (such as restaurant-owners, shopkeepers and industrialists). In other words, even property rights are better defined in these sectors.

Fourth, the risk of potential fall in demand (and hence prices) is lower in these sectors, as they do not face foreign competition and very limited competition even within the country. Neither foreigners are allowed to invest in these sectors (not that I am proposing they should) nor consumers move to foreign countries to acquire them. Moreover, the markets for these sectors are quite segregated even at the national level. The prices are determined locally: local demand

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26 The land building registration tax is about 0.23% of GDP. This tax should be lowered to a minimum as a flat rate such that not only the transactions will be encouraged but also there will be no competition in lowering the property value at the time of ownership change as is the case now in a bid to pay less tax.

27 Demand for these sectors is quite inelastic (the changes in demand with respect to price increase are very small) as they are considered essential goods and services (for those who can afford). As people see urban area as center of everything, whoever can afford to buy a small piece from remittances or other income is doing so thinking that the price will be even higher in the future. Similarly, as public education is far inferior to private education and public health provision is inadequate and of low quality, there is ongoing investment incentive in these sectors.
has to be fulfilled by local supply, completely so in terms of land which is immobile and to some extent for education and health. This lack of competition prevents prices to come down, making it suppliers' market. On the contrary, investment in other internationally traded sectors such as car manufacturing, clothing and machinery etc, has to compete with outside world. Who would like to invest in sectors where there is cut-throat competition when one can invest in education and health that are protected from competition?

The nature of market for land, education and health in Nepal is not different than in other countries. What is difference is that rather than counter-balancing the built-in advantage of these sectors as done in other countries, economic policies in Nepal have exaggerated it. The low property tax rates for urban houses and homesteads, no penalty for keeping agricultural land barren, lack of quality education in public schools, higher cost imposed by corruption, red tape, and rentier activities in other sectors are some of these policies that are diverting savings from other sectors to these sectors.

The investment made in land, education and health is not necessarily adding value to the society. In case of land, when sold—as it is the same piece of land and no employment or further investment is made—no new output is added and therefore does not increase GDP. The ownership change is wealth transfer not wealth creation. It is a rent—the portion of income paid to a factor of production in excess of its opportunity cost (amount required to keep it in its current use)—not increase of output that benefits society. Land is nature’s gift in inelastic supply and its presence will there even at zero prices, indicating that what is earned as being a mere titleholder is economic rent. Secondly, the rising value of land is largely due to government services (e.g. roads, public schools, maintenance of peace and order, etc.), rather than actions of landowner. Therefore, if the government expenditure is not recovered from taxes, that is, if the benefit principle is not adopted (full payment by the beneficiaries), the land-owner extract even more rent. And, that is what is happening in Nepal for decades.

Similarly, in education, private investment has not created provision for those who would not have education otherwise, rather it has made possible to switch from public to private schools. Students are getting better education than they would have at public schools but if there were good public schools, the duplication of resources would not have occurred. There are
reports stating that most of the class rooms in public schools are vacant, indicating that investment in education is more of duplication.\textsuperscript{28}

\textbf{Issue 3. Land rent has been a prime killer of incentives in the country.} The rent that land owners accumulate in Nepal is a major distractor in that country’s development; it kills incentives for hard work, innovative thinking and investment in other employment generating sectors. Few people are getting rich by selling land and have no respect for hard work as they collect huge rent from land. On the other hand, despite the hard work, vast majority of Nepalese cannot hope of acquiring any small piece of land in their entire life. For a nation’s economic growth and development, it is imperative that reward goes only to those who add productivity to the society. By that standard, land rent has to be minimized substantially. Obviously, as the source of land rent is land ownership, the first best solution to minimize land rent would be to have some sort of land reform, which is also highly justified on equity ground.

However, there are two myths that need to be debunked, that is, the parties are for land reform and that land reform will solve all the problems. First, there is no political will for land reform; among the three parties, the NC and the UML had the chance of setting lower ceilings when they were in power in 2001. They did not do it despite the fact that the government formed body—the Badal Commission—recommended lower ceilings.\textsuperscript{29} The UCP (Maoists) does not seem to be different either. Second, even if land reform is carried, there is very limited amount of land that can be acquired. Based on 2011 agriculture census report, for example, if per family land ceiling is set at 2 ha, there will be 202 thousand ha surplus land (8% of cultivated land) for distribution. If distributed only to those that have less than 0.1 ha (471 thousand or 12% of agricultural, households), each household will receive 0.4 ha; if distributed to those who have less than 0.2 ha (933 thousand or 24% of agriculture, households), each household will receive 0.2 ha, and if distributed to those who have less than 0.5 ha (2.1 million or 54% of agriculture

\textsuperscript{28}Leaving aside the debate of whether public or private basic education, it should be noted that in \textit{developed} countries, there are very few students that attend private schools and these private schools are not-for-profit; all income earned is used for the benefits of the institutions (teachers, students). But in case of Nepal, all private schools are for-profit that goes only to investors.

\textsuperscript{29}Presently, based on Land Acts amendment 2001, ceilings are set at 3.75 ha in mountain and hill (3.5 plus 0.25 for homestead), 1.55 ha (1.3 plus 0.25 for homestead) in Kathmandu valley and 7.37 ha (6.7 plus 0.67 for homestead) in Terai. Badal Commission 1995 recommended two types of ceilings for rural and urban areas. The ceilings for rural areas are: 4 ha in mountain, 2 ha in hill, 1 ha in Kathmandu valley and 3 ha in Terai. The ceilings for urban areas are: 0.5 ha for cities and 1 ha for municipalities.
households), each household will receive 0.1 ha. Obviously, the land size for distribution would be even smaller if the ceiling is set at 2.6 ha as recommended in Badal Commission report.\(^{30}\)

However, irrespective of the amount of land acquired, land reform will create better economic environment in both farm and off-farm sectors. In case land reform is forbidden, we may have to opt for the second best policy that is the use of fiscal tools—design land and urban property tax policies—to lower land rent to such an extent that investing off-farm becomes a far better option. A highly progressive tax rates for owners with more than one piece of homestead, more than one house and agriculture land that is not cultivated are desirable policy tools.

No matter which policy is adopted—land reform or fiscal reform—additional policy will be needed to increase productivity of the agricultural sector that has been stagnated for so long. This policy should be accompanied by a provision of commercial farming. The land productivity is so low that farmers are discouraged from farming and also, due to foreign migration, only seniors are in the village with no people to work in the field. The only way to tackle this low productivity and ensued labor shortages are by developing legal framework for commercial farming. The framework should be such that a firm acquire adjoining lands from several farmers for farming for few years, potentially 10 or 20 years. The legal framework should be such that it protects both, the owner and the contractor, in a way that is very transparent and explicit.

*Issue 4. Foreign aid should not be part of Nepal's development strategy, whereas foreign direct investment should definitely be.* Nepal has been receiving foreign aid for many years, and we should be thankful to donors for their generosity. Nepal receives about 12-16% of budgetary expenditure (or 14-19% of total government revenue) through foreign aid, about 3% of GDP. Now, time has come for Nepal to stop receiving foreign aid except for humanitarian cause. The following are some of the reasons the led me to make this proposal. First, according to research there is no guarantee that foreign aid buys growth even in countries with good policies and in case of corruption and weak government aid could even be harmful (Easterly, 2003). Second, because of foreign grants, government is not being sincere and disciplined in formulating sound fiscal policies, both in revenue and expenditure sides. Third, foreign aid has exacerbated the inequality (across regions and individuals), that has been created by other domestic policies. Fourth, foreign aid has created problems related to accountability, as misuse of resources by

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\(^{30}\) Compared to 202 ha of land in ceiling of 2 ha per family, if family ceiling is set at 3 ha only 86 thousand ha (3.4% of cultivated land) and at ceiling of 2.6 ha, about 165 thousand ha (6.5% of cultivated land) of land will be available for distribution.
government authority and people in power is not taken as misuse of taxpayers’ money, thereby people turning blind eyes towards corruption. Fifth, directly put, it is time to think what Nepalese, rather than foreigners, can do for Nepal.

The problem with foreign aid is not so much about the motives of the donors, it is the corrupt and dependent mentality of Nepalese government which more or less translates into “take-it whenever and whatever is available”. Unless this attitude is changed to “let us try it ourselves”, Nepalese will never be able to start the process of building a strong and prosperous nation. Stopping foreign aid may not be sufficient but it is a necessary condition for this change to occur in the mind set Nepalese policymakers. It is time for Nepal to give it a try to switch from a shameless beggar to a foreign direct investment (FDI) host country.

Increasingly, there is a competition in providing incentives for FDI in all countries in the world. Foreign companies are allowed to invest and even own (with more than 50% of asset value) unless the sectors are protected due to concern of breach of national security and reduction in market competition. However, in Nepal, there are quite a few assertions about FDI which are not necessarily conducive for welcoming FDI. Some of them are: (i) FDI will take away Nepal’s nationality (ii) Nepal will be captured by monopoly capital (definition?) (iii) only national capitalists will save the country (how are they different from other capitalists?) (iv) the multinationals will rip off the Nepalese (compared to present joblessness?) (v) if provided with concessional tax rates, the non-resident Nepalese (NRN) will bring substantial capital in Nepal and (vi) once the constitution is on place, there will be large inflows of FDI and so on.

All the three political parties harbours some or all of these claims that are flatly false. Consequently, these parties are either in denial of FDI benefits or are irresponsibly optimists in getting enough FDI. The fact is that given the right set of domestic policies in place the long-term economic benefits from FDI outweigh any possible short-term economic adjustment difficulties in host countries. FDI not only provides much needed investment, it also allows domestic companies to learn from foreign technology as suggested in equation (4). Nepal should treat investment from all countries and nationalities—whether from Delhi, or Beijing, or Moscow, or Washington—equally. Giving tax incentives to NRN will be detrimental for Nepal’s effort to bring FDI as this will discriminate against huge pool of capital that exists in the world. Investors are working at the margin; a slight favour to one nationallty will bar other nationalities to compete, ultimately imposing cost to Nepal. NRN do not need a special treatment, they
already have one as they are familiar with Nepal’s culture, language and surroundings. It is absurd to link FDI with the loss of nationality. If ever there were a case that nationality was stronger with a louder shouting from the politicians that era has gone. Nationality gets stronger when citizens are stronger; citizens become stronger once they have more economic resources enabling them to be educated and make economic choices. FDI helps expand those resources. 

*Issue 5. Economic growth is about releasing the forces of economic growth from the hands of government in some sectors and initiating smart regulations and increasing the role of government in other sectors.* Economic growth is not only about pouring money, it is more about efficient allocation of resources and hence about minimizing market failures and government (policy) failures. Broadly speaking, markets are efficient (social efficiency is obtained) if the marginal benefits to society for either production or consumption are equal to the marginal costs of either production or consumption. In this case, markets are efficient and government intervention imposes cost to the society. However, if there are externalities, meaning that the private sector passes some of its costs (negative externalities) or spills some of its benefits (positive externalities) to the society, the societal efficiency is not obtained. Compared to socially desirable level, there will be more production or consumption in case of negative externalities and less production or consumption in case of positive externalities. In this case, we say that markets fail, and government intervention is required to establish social optimum.

None of such rules are given any thoughts in Nepal. Government is everywhere in distorting the markets and almost nowhere in correcting them. Reading the political platforms, one gets the feeling that the parties have no sense of where market fails requiring government intervention and where markets work better than government. The Platforms offer list of services giving the false impression that what is left in Nepal is to distribute the pile of wealth that is lying. As a rule of thumb, there should be minimal government intervention in other sectors, except in education and health, where not only markets fail (social benefits being more than private costs) but also their better provision is a precondition for both growth and equity. This takes me to the second determinant of labor productivity, human capital, in equation (2).

6. C. Human capital: The most neglected sector that could be a game changer
A prerequisite for an equitable and prosperous society is to have equality of opportunity—broadly, a condition that a child of a poorest section of the population has equal chance of ending
In the highest income bracket. In other words, under equality of opportunity, parents’ income and education are not strongly related to children earnings in adulthood. For achieving the equality of opportunity, education is the most—almost only—effective instrument. A country further from this threshold of equality of opportunity is wasting its human resources to its peril. In Nepal, the concept of equality of opportunity is a joke; it is ridiculed to the level unimaginable. Not only there is no equality of opportunity, but the opportunity gap is widening.

Educated workforce is one of the pre-requisites for faster economic growth, development, and institutions building, including making public officers accountable to their promises and actions. Educated workforce generates ideas. It may also spill unpaid benefits at the community, nation and also international levels. If there is any single action that could ignite the growth forces in Nepal, it would be providing scientific and top notch education to all till 12th grade. However, Nepal’s failings in education are alarming and multifaceted. Because of space limitations, I will confine to a few major issues that need to be addressed urgently. The parties are full of programs on education but none of them would address these urgent issues.

**Issue 1: Majority of workforce in Nepal is functionally illiterate.** According to population census 2011, 40% of people of age 15 and above were illiterate in Nepal (compared to 5% in China). Using more functional form of literacy level (education of above grade 8), 53% of them, 9.14 million, were illiterate (150% of the combined labor force of Hong Kong and Singapore), an enormous loss to the country 17.25 million people. The youth do not fair better either; among people between 15-24 ages, the illiteracy rate is about 20%.

**Issue 2: The inefficiency in education system is horrifying.** Only 3.6% of those that started grade 1 in 2002 completed SLC in 2011 without failing and dropping. The inefficiency can be displayed in various ways. First, examine the student distribution across different levels (ranging from grade 1 to PhD) in 2011. What is disappointing is the height across bars (in Figure 7) that shrink in each subsequent grade. It is understandable that part of this shrinkage can be attributed to population growth, but this factor would lower the students by only 13% in grade 10. That is,

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31 In case of US, Stiglitz (2012) propose a definition “if American were really a land of opportunity, the life chances of success—of say, winding up in the top 10 percent—of someone born to a poor or less educated family would be the same as those of someone born to a rich, well-educated, and well-connected family.

32 In 2011, there were total of 8.34 million students (grade 1 to PhD). Among them, students from grade 1 to 10, constituted 89% and from grade 1 to 12 constituted 96%.
had there been full efficiency, 87% of grade 1 students should be attending grade 10.\footnote{As these bars represent distribution in 2011, the pupils that are in grade 2 and above started school in earlier years (one year ago for grade 2, nine years ago (in 2002) for grade 10, and so on). As population in this period rose by 1.35% annually this should make number of students in each subsequent grade smaller than in the previous one.} However, as seen in the figure, only 15% (198 thousand) students in grade 1 (1,349 thousands), passed SLC. This loss of 72% (87 minus 15) students from grade 1 to SLC graduation is due to inefficiency in the system. In a developed country, the height of bars through grade 1 to 12 remains more or less equal, save for population growth.

Yet, this loss (shrinking height of the bars) captures only partial inefficiency, as the numbers in the bars also includes students that have repeated. To measure inefficiency in its full extent, I use cohort approach and analyze a "what if" scenario which runs as follows. If 1,349 thousand students had started grade 1 in 2002 (as in 2011), how many students would have been promoted (without repetition) in each grade (2 through SLC) in years 2003 through 2011, respectively.\footnote{Rather than using the number of students that started grade 1 in 2011, I could have instead used the actual number of students that enrolled in grade 1 in 2002, which was 1,011 thousand. The advantage of using the number of students in 2011 is that it allows me to put the numbers in the same charts without changing the basic message.}

For this calculation, I use year-specific promotion rates for each grade (2002 grade 2 promotion rate for grade 2, 2003 grade 3 rate for grade 3, 2011 SLC rate for SLC etc). The number of promoted students using this method is represented by the lowest line in Figure 7 which shows that out of 1,349 thousand students enrolled in grade 1 in 2002, only 3.6% (47.9 thousand) would have completed SLC without failing any grade. In the last ten years 96% of the students (from grade 1 to grade 10) either dropped or failed at least once.

One might argue, and correctly so, that since the efficiency (promotion rates), has improved over the years, one should consider more recent rates; bygone is bygone. I have two quibbles on this. First, bygone is not bygone; because of inefficiency in the past the stock of human capital is very low (more on this later). Second, the recent promotion rates, though better,
are still worrisome. Using the promotion rates achieved in 2011 for all grades 1 through SLC, I plot the number of students that would complete each grade without failing and dropping, as middle line in Figure 7. Result: if the present promotional rates continue for the next ten years, only 11% (149.7 million) students that had enrolled in grade 1 in 2011 would pass SLC in 2020. There will be 89% failure on the way. Yet, this overestimates the promotion rates for public schools because I have used joint (public and private schools) promotion rates to calculate these numbers, but those rates are lot higher for the private schools.

Finally, the top line in Figure 7 measures, what I call, “the number of students with target efficiency”. We should make a target that 96% of students that enrol in grade 1 are promoted to grade 10 and 95% pass the SLC. This should be a commitment for ten years and achieving this target would change Nepal’s destiny completely for better. Education is sector where the return to nation’s investment would be the highest and would release growth opportunity in the country. If done properly, this can be achieved without costing resources to other sectors of the economy. As a summary, in Table 8, I report the numbers in Figure 7 for grades 1 and SLC.

Table 8. Inefficiency in education system

<table>
<thead>
<tr>
<th>Grade passed</th>
<th>Actual and promoted # of students (000)</th>
<th>Share of students in grade 1 enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual in 2011</td>
<td># of promoted students using</td>
</tr>
<tr>
<td>Grade 1</td>
<td>1,349</td>
<td></td>
</tr>
<tr>
<td>SLC</td>
<td>198</td>
<td>48</td>
</tr>
</tbody>
</table>

PR stands for promotion rates. The first column represents the numbers in bars (actual students in 2011); the second column is from the lowest line; the third column is from the middle line, and the fourth column is from the top line. The next four columns are respectively the shares of students that complete SLC in total enrolment in grade 1.

35 The promotion rates for year 2011 through grades 1 to SLC are, respectively: 70.8, 87.4, 89.0, 88.8, 88.4, 88.3, 88.9, 86.9, 89.4, 89.4 and 47.2.
36 Having worked with Nepal’s data for a while, I have been accustomed to take any magnitudes of inefficiency and inequality in that country as “normal”. But, the education inefficiency using promotion rates that I calculated were beyond comfort zone even by my standard. Thinking I might have got it wrong, I contacted, via email, Director General of Department of Education in Nepal, requesting him to check whether I was making the right use of their published data. I sent him detail data spreadsheet along with a right-up explaining how I got the numbers. He promised to check the numbers and get back to me soon. As I could not get any response after six email correspondences and three months of waiting, I stopped bothering them. Checking their own published ten data points should not have taken them more than few minutes.
37 The inefficiency that I computed above is combined of both public and private schools. Had there been data on promotion rates by types (public and private) of school, the inefficiency in public school would be even higher. Take SLC for which passing rate is available by types. In 2011, the combined rate of success was 47.2%, the rate for public school was only 35.5% compared to 85% for private schools. In other grades, the difference would not be that high, but certainly will be lower for public schools.
Issue 3. Education system is poised to increase income inequality, just opposite to what a successful nation aspire to achieve through education. The primary aim of education is to serve as an equalizing instrument for society, but in Nepal that is not the case. Education is systematically making rich richer and poor poorer. Even those that are lucky to be graduated from the SLC iron-gate, almost all of those from public schools are not getting anywhere because of their already poor performance in schools. Among the students that appear in SLC exam in 2011, only 9% from public schools obtained either First Division or Distinction (Figure 8), whereas 71% students that appear in SLC from private schools obtained either First Division or Distinction. Among the remaining 91% in public school, 63.5% failed and 17.4% passed either in second or third divisions. In private schools, the failure rate was 15% with remaining 14% passing in second or third divisions. For anyone who knows Nepal’s higher education system and the job markets, it is obvious that passing SLC in second or third divisions is like a failure both in terms of getting admission in science, engineering or medical fields and advancing career in any skill related jobs. Therefore, in practical sense, the percentage of failure is 91% in public schools and 30% in private schools (or 63.5% vs. 15%, in official sense). It is so sad that students residing at the same communities and neighbourhoods have four times higher failure rates if they attend public instead of private schools.

Slicing the data on the quality of education differently, would reveal even more on in(equality) of opportunity. Private schools which contributed only 22% of SLC examinees had 90% of distinction holders, whereas public schools that contributed 78% examinees were limited to only 10% distinction holders (Figure 9). Similarly, among the students that obtained first division, 64% were from private schools. The performance is so much better in private schools that those parents who cannot afford to send their children in private schools are migrating temporarily in foreign countries for hard and dangerous manual work. In the last ten years, there was 5 percentage-points increase in the share of students going to private schools, reaching 16% in 2011.\textsuperscript{38} The only reason for having still so many students in the public school is that their parents cannot afford to go to foreign countries for manual work. Otherwise, the number of students in public school would dwindle

\textsuperscript{38} In 2011, the percentage of students attending private schools is 16%, ranging from 15% in primary, 16% in lower secondary, 22% in SLC appearance and 12% in grade 11 and 12.
more rapidly. Nepal will see young parents continuing to migrate to earn tuition fees for preschool and primary education for their children back home.

Even good education may not provide any job opportunity in Nepal but certainly there are no opportunities for people who do not have good education. If the country was growing faster, more income would be generated and people could make a living by doing some service related works even without higher education. But with majority of population at subsistence level, not many can be absorbed in apprentice or service related occupations. Hence, being deprived of good education is almost a guarantee that one would fall in poverty. As people who attend private education are the ones who are getting better paying jobs and also are from higher level of income bracket, education is increasing income inequality rather than reducing it. There is no economic mobility across generations—the children of poor parents will not be able to move to higher income brackets—a social phenomenon that is considered a major contributor for innovation and growth in developed world. Instead, in Nepal, social mobility has declined over the years for two reasons. First, the gap in education efficiency between the private and public schools is getting starker. Second, the wage gap between more-educated and less-educated workforce is rising compared to the last decade(s). The society has regressed.

The public schools are lagging behind private schools despite the fact that the resource put at the public sector is not substantially different from what is invested at the private level on per student basis. In 2011, per student annual government expenditure in public schools was about Rs 9,000 and combining Rs1000 from students, the total was Rs 10,000. Back of the envelop
calculation shows that per student annual expenditure in private schools was about Rs15,000. Take out 25% as profits (or cost of buying government officials) for investors, we don't see much difference in spending between two types of schools. That begs a question of how one should deal with this issue; certainly more resources at the education sector are needed but the past system of putting money is not working. It also shows that had there been good education policy, with the same resources that are used in education now, we could get at least the efficiency of private schools, a huge improvement. In this context, it is worthwhile to report a finding on India by McKinsey Global Institute which states that, “the relative efficiency across India’s state indicates that same outcome would have been achieved with half the level of spending on education and about one-third of the spending on health” (2014, page5). Nepal being more inefficient than India, the waste is even higher.

Among many other things all three parties have the agenda making education till grade 12 free (NC, page 44; UCP, page 41 and UML, page 35). But if the inefficiency remains what we discussed, nobody who can afford private schools—even at the cost of losing lives in Middle East—will do so. The main problems in education are continuing erosion of education standard in public schools, massive failures and drop out. When children from poor families are unable to continue their education because of financial constraints, they do not accumulate the optimal amount of human capital. The outcome is both unequal and inefficient; creating two distinct societies on economic divide and reducing growth potential of the country substantially.

6. D. Stock of ideas: too little

Idea or technological knowledge capital is very important for innovation which is instrumental in achieving higher growth, competing in international markets and raising standard of living. The best indicators of ideas or knowledge capital are researchers as a share of all workers (Romer 1990) or share of highly educated labor force or input measures of innovation such as research and development (R&D) capital. Nepal does not have researchers that hunt for ideas and also no R&D expenses. It also does not have many highly educated people who can understand and imitate the frontier foreign technology. According to population census 2011, there were 12.77 million people that were above the age of 23 (potential age of completing Master’s) and only 158

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[39] Innovation could be of four types: product (bringing new products in the market), process (lowering the existing production cost), market (selling more in domestic and foreign markets) and organization (raising organizational efficiency).
thousand, 1.3%, had completed Master’s (Table 9). And, only 11% of population with age of completing higher secondary did so. Furthermore, there were only 616 thousand people that had completed Bachelor, a meagre 4.6% of the potential population.

**Table 9: Education status of Nepalese**

<table>
<thead>
<tr>
<th>Level of education</th>
<th>Age group</th>
<th>Number of population (in thousands)</th>
<th>Share of educated in population of potential age group (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>In the completing age of this level</td>
<td>That have completed the level</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------</td>
<td>-------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>SLC</td>
<td>Above 16</td>
<td>16,594</td>
<td>1,636</td>
</tr>
<tr>
<td>Higher secondary</td>
<td>Above 18</td>
<td>15,410</td>
<td>1,036</td>
</tr>
<tr>
<td>Bachelor</td>
<td>Above 21</td>
<td>13,700</td>
<td>458</td>
</tr>
<tr>
<td>Master’s</td>
<td>Above 23</td>
<td>12,765</td>
<td>158</td>
</tr>
</tbody>
</table>


In column (2) we designate the minimum age that is required to complete the level of education (degree) given in column (1). For example, to complete SLC one has to be above 16. Based on that age group, in column (3) I calculate the number of population at the age of completing the degree given in column (1). In column (4), I have actual numbers of people that have completed the given degree. In column (5), I calculate the number of people that have at least the degree given in the corresponding row, using column (4). The entry of 616 in row “Bachelor” is obtained by adding entries 458 plus all the other people that have higher than bachelor education (given in column 4, 158 with Graduate level).

**Issue 1. Nepal lacks innovative activities in every aspect of its operation.** The lack of highly educated people—who should be pivotal in leading local innovation, understanding blue prints, absorbing foreign technology and getting involved in scientific, economic and financial research—is shutting the door for innovation and smart policy choices. Adding salt to the injury, the quality of education is not up to the standard; in some cases, time spent at universities is a waste when it comes to applying university knowledge in work place. In most cases, universities are cadre recruitment center for political parties rather than center of excellence in learning. Degrees are obtained to derive “social prestige” rather than to join the labor market. Even among this small pool of people, a substantial part are already out of country, either to work as labor in middle east or to get higher education or settle in developed countries.

Certainly the focus of government resources should be on high school education. However, it should make every attempt to mobilize highly educated labor force inside the country and Nepalese expatriates in terms of making Nepal a country with grand and noble ideas and actions. I would not recommend providing dual citizenship (no matter how loud the demand is) but would suggest establishing a framework that allows Nepalese diaspora to contribute in Nepal’s innovation drive effectively and efficiently if they desire to and are capable of. We,
diaspora, should understand that now it’s our time to pay back, breaking the usual flow of benefits (entitlement) that we have been taking so far from that country.

6. E. International trade: another lost battle for Nepal

For country like Nepal which has very small domestic market and massive underemployment and unemployment, exporting will be vital in generating higher incomes. All the growth-lead countries had achieved high growth rates mainly through exports which enabled them to utilize unemployed resources, raise income and also increase domestic saving. Is Nepal poised to take the same track? One should be optimist, but Nepal has lost the battle miserably. For both China and India, the share of exports of goods and services in GDP (export intensity) is rising, reaching as high as 39% in 2006 and 31% in 2011 (for China) and 24% for India in 2011 (Figure 10). Nepal's export intensity, however, has been falling continuously from peak of 26% in 1997 to 9% in 2011. Till 2000, Nepal had the highest export intensity among these three countries but Nepal's situation is deteriorated continuously since then.

The imports, however, are consistently rising for all three counties, and Nepal had the largest import intensity at 33% in 2011, compared to 27% for China and 30% for India. The trade deficits have substantially widened in recent years as shown in Figure 12 where I also report the share of remittances in GDP. The two lines are almost the mirror images.\(^{40}\) Ironically,

\(^{40}\) The general perception is that income flows from outside are more than what these data suggest for three reasons. First, the money brought back by seasonal migrants (being abroad for six months or less) is counted as current transfer not remittances, which might exclude income flow from India where some migration is of seasonal nature. Second, unofficial transfers (such as hundi) are expected to be very high. Third, there is also the case that money is carried in person to hand over to the relatives of the sender in Nepal.
the unskilled labors that migrate to foreign countries in count of about 1,200-1,300 each day (about half a million each year) are the ones that are helping finance the foreign exchange earnings required for Nepal’s imports. Its exports are not enough to finance the imports of even fuel; in 2011, exports were only 80% of fuel imports.

Nepal’s trade, both exports and imports, is highly taxed. The share of import tariffs in total government revenue is 20%. If one considers both tariffs and value added tax on imported goods and services, the share rises as high as 46% of total government revenue. In developed countries most of the tax revenue is through direct taxes and the share of trade in tax revenue is negligible (less than 5%) but Nepal is continuing with international trade as a fiscal tool. Nepal protects inefficient domestic producers and industries by imposing high tariffs and forcing the general public to pay higher prices for imported goods. Import tax on necessary goods not only makes people poorer by reducing their purchasing power, it also transfers resources from consumers to producers. The political parties are extremely producer-bias and never consider the fact that to have something cheaper in the market is an increase in social welfare. Trade policy should be used to expand, not restrict, trade and imports of necessary goods should be liberalized.

**Issue 1. Exporting is a relatively difficult proposition for Nepal but it should not be that way.** For a country to be able to export, it should have at least one of the following conditions (i) low production cost compared to other countries (ii) new (niche) products (iii) larger domestic market allowing firms to take advantage of increasing returns to scale (per unit production cost falling with production) and (iv) and presence of multinationals. These conditions that provide competitive edge in trade are not easily available in Nepal. Because of unavoidable geographic circumstances and other government induced costs (we will discuss them in detail under institutions), exporting is a relatively difficult proposition for Nepal. But if the inefficiencies related to input supply and other rent-seeking behaviours are reduced, Nepal can enjoy the burgeoning two markets in China and India. Exporting in these countries will also substantially cheaper in terms of transportation costs. Nepal should make a target of capturing at least 0.33% (one-third of one percent) of combined goods imports of China and India. That would have put
Nepal in export intensity of 40% which the country should target to achieve.\textsuperscript{41} Government should engage industries, entrepreneurs, and investors in formulating policies that help Nepalese companies to export in foreign markets especially in the neighbouring countries.

6. F. Nepal’s institutions: wrapped with corruption and inefficiency

Institutions that constitute the formal and informal rules of the game in a society—the humanly devised constraints that shape human interactions—are very important vehicle for economic growth [see North (1990), and Acemoglu and Robinson (2012) for details on institutions].

Institutions, consisting of constitutions, laws, socially sanctioned norms of behaviour or culture, define incentives—what people decide to do—in the society, whether economic, political, or social. Unfortunately, institutions in Nepal are stumbling, rather than building, blocks for economic growth and development. They create perverse incentives, kill morale, discourage hard work, and penalize honesty and tolerance. The political parties have nurtured and shaped these institutions that have made Nepal, primarily, a rent-ridden society.

**Issue1. Economic rents and rent-seeking activities are pervasive in Nepal, reducing the size of economic pie (inefficient) and raising economic inequality (inequitable).** As discussed above, economic rents are income paid to factors of production in excess of its opportunity cost (earning in the next best alternative). If people earn more than what they produce—their marginal product—as benefit to the society, this is called rent. Rents are created due to natural or non-natural exclusivity. The first refers to something like land rent (which is created due to nature’s fixed supply of land) whereas the second refers to exclusivity created by government policy interventions (and lack of them). Some government policies that create rents are: limiting licenses on any activities, awarding contracts without competition or to the lower bidders, hiring not based on meritocracy, privilege of wealthy and powerful over other citizens in any government services, government officials taking bribes and providing favoritism, misuse of government resources for personal cause and so on. Both land rent and other policy-created rents are pervasive in Nepal.

\textsuperscript{41} In 2012, the total imports of goods in China and India were worth of US$2.3 trillion (1.8 billion for China and 0.5 billion for India). Taking 0.33\% market share of these two countries’ imports would have been exports of US$ 7.5 billion, almost double the amount of total actual exports to the world at US$ 4.2 billion. With Nepal’s GDP of US$ 19.4 billion (at 2012 current price) the export intensity would have been 40%.

\textsuperscript{42} The institutions can be formal such as rules that human being devised and informal such as convention and codes of behaviour which are socially transmitted information and part of the heritage that we call culture. 
As the political parties are prone to make policies that generate rents, the country is riddled with rent-seeking activities (term coined by Anne Krueger, 1974). They are defined as spending wealth on political lobbying to manipulate political environment—such as acquiring monopoly power in selling products/services, favorable regulations, or restrictions on trade from political allies—to increase one’s share of existing wealth without creating wealth. So rent-seeking not only redistributes income in the form of rents but also wastes additional resources in buying regulations that create and sustain rents. Rent-seeking activity is very costly to economic growth; it breeds more of it as well. If “buying” a favorable government policy is cheaper than investing for more efficient production, a company may choose the former option, reaping incomes but not contributing to wealth creation. That is, where Nepal is today. Deservingness is lost in the wilderness, whereas happenstance is the norm. Rent-seeking is valued over productivity. People get rich by not making contribution to the society (production) but by milking the system, or bribing the politicians, or siphoning public resources, or taking advantage of some market failures or distorting the markets. “Richness” results from political rent-seeking rather than producing a valuable product (such as Iphone). As the beneficiaries of rent-seeking activities are the ones who are rich, powerful and well connected, such inefficient (pie reducing) policies have also increased income inequality.

**Issue 2. Because of its rentier activities, Nepal is a very costly country to conduct business.**

It’s not only Nepal’s land-locked situation that is making Nepal a costly country for business, rent-seeking activities such as corruption, redundant paper works, inefficient bureaucracy, no respect for rule of law are piling a huge additional costs. As reported in Table 10, Nepal’s per container trade cost is more than 400% higher than that of country with globally cheapest trade cost (Malaysia); almost 300% higher than that of China and 100% higher than that of India. The value of exports in a container differs by the nature of product, but if we assume that, on average, a container includes goods and services of worth US$50,000, Nepal would have additional trade costs of 8% to its two-way trade value compared to the leader, 7% compared to

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43 Cost measures the fees levied on a 20-foot container in US dollars. All the fees associated with completing the procedures to export or import the goods are included. These include costs for documents, administrative fees for customs clearance and technical control, customs broker fees, terminal handling charges and inland transport. The cost measure does not include tariffs or trade taxes. For time to export/imports variables, time calculation for a procedure starts from the moment it is initiated and runs until it is completed. If a procedure can be accelerated for an additional cost, the fastest legal procedure is chosen. The waiting time between procedures—for example, during unloading of the cargo—is included in the measure.
China and 5% compared to India.\textsuperscript{44} Furthermore, it takes almost a month longer (almost three-times compared to India, Nepal’s only gateway to seaport) to complete the trade procedures. This has certainly added cost to Nepal (vis-à-vis the neighbouring countries) but it is hard to determine by how much. So the cost disadvantage to Nepal compared to China and India would be even higher than computed above.

As multinationals generally sell their products in both host and other countries, this additional trade cost could also be a factor in making Nepal less attractive place for FDI. In terms of flow, Nepal received only US$ 91 million FDI in 2012 (only 0.5% of GDP) whereas its neighbours’ FDI inflows were 1.5% of GDP. As a result of continuously low FDI inflows in Nepal, the stock of FDI in GDP is only 2.4%, only very few countries in the world have such a low share of FDI stock in GDP.

\textbf{Table 10. Trade and foreign direct investment cost, 2012}

<table>
<thead>
<tr>
<th>Country</th>
<th>Cost to export (US$ per container)\textsuperscript{a}</th>
<th>Cost to import (US$ per container)\textsuperscript{b}</th>
<th>Time to export (days)\textsuperscript{c}</th>
<th>Time to import (days)\textsuperscript{d}</th>
<th>Inward FDI flows, (US$ mil.)\textsuperscript{e}</th>
<th>Inward FDI stock in GDP in 2012 \textsuperscript{f}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leader</td>
<td>450</td>
<td>440</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>197,187</td>
</tr>
<tr>
<td>China</td>
<td>620</td>
<td>615</td>
<td>21</td>
<td>24</td>
<td>2</td>
<td>119,933</td>
</tr>
<tr>
<td>India</td>
<td>1,170</td>
<td>1,250</td>
<td>16</td>
<td>20</td>
<td>17</td>
<td>27,620</td>
</tr>
<tr>
<td>Nepal</td>
<td>2,295</td>
<td>2,400</td>
<td>42</td>
<td>39</td>
<td>166</td>
<td>91</td>
</tr>
</tbody>
</table>

Leader: Malaysia, Singapore, Denmark; \textsuperscript{a} to \textsuperscript{d} and UNCTAD database for \textsuperscript{e} to \textsuperscript{f}

In inward FDI stock to GDP, the value for Hong Kong was the highest followed by Singapore, but I have chosen the third ranked country, Belgium, as a leader. All indices are in 2012/2013 but for FDI inflows, to avoid the year to year cyclical nature, I use three (2010 to 2012) average.

This is not all; there are other additional costs imposed on Nepal as reported in Table 11. There are 115 countries that are less corrupt than Nepal. Nepal’s score of 31 compared to most clean country, Singapore, with score of 91, meaning that Nepal is 60 percentage-points (or 66%) more corrupt than Singapore (politicians, who repeatedly say they would make Nepal like Singapore, should make a note!).\textsuperscript{45} Nepal is 10% more corrupt than China and 5% more corrupt

\textsuperscript{44} It is obtained by taking difference of costs of trade (both exports and imports) to Nepal and other countries and computing percent of that value in US$50,000 (the value in a container).

\textsuperscript{45} The Corruption Perceptions Index scores 177 countries on a scale from 0 (highly corrupt) to 100 (very clean). Score of below 50 means a serious corruption problem. On ease of doing business, economies are ranked using 10 topics related to starting and operating a business. The score (0 to 100) is the closeness of each economy to the frontier, the highest performance observed. A scale of 0 represents the most difficult economy for business and that of 100 represents the frontier (the easiest economy). The Global Competitiveness Index assesses the competitiveness of 148 countries, weighted average of the 12 different pillars related to institutions, policies, and factors that determine the level of competitiveness of a country. High score means more competitive (productive).
than India. The back of the envelop, a very conservative calculation (favoring Nepal to be better country), shows that these indices—the making of political parties—have added at least additional costs of about 34% compared to leader country (in each category); 16% compared to China and 10% compared to India. By combining this cost with cost of export and imports calculated above, we find that Nepal’s economy imposes an additional cost that is 42% higher than that of leader country, 23% higher than that of China and 15% higher than that of India. Unless the political parties are ready to eradicate these costs, Nepal will not have a chance to attain sustained higher economic growth.

Table 11. Nepal’s position in different global indices

<table>
<thead>
<tr>
<th>Countries</th>
<th>Corruption perceptions index</th>
<th>Ease of doing business</th>
<th>Global competitiveness index</th>
<th>Cost of business start-up procedures (% of GNI per capita)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leader</td>
<td>1</td>
<td>91</td>
<td>1</td>
<td>92.4</td>
</tr>
<tr>
<td>China</td>
<td>80</td>
<td>40</td>
<td>96</td>
<td>60.9</td>
</tr>
<tr>
<td>India</td>
<td>94</td>
<td>36</td>
<td>134</td>
<td>51.3</td>
</tr>
<tr>
<td>Nepal</td>
<td>116</td>
<td>31</td>
<td>105</td>
<td>60.7</td>
</tr>
<tr>
<td>Lead country</td>
<td>Denmark</td>
<td>Singapore</td>
<td>Switzerland</td>
<td>Denmark</td>
</tr>
<tr>
<td># countries</td>
<td>177</td>
<td>189</td>
<td>148</td>
<td>188</td>
</tr>
</tbody>
</table>


Note: The score on ease of doing business is the distance of each economy to the frontier, the highest performance observed. An economy distance to frontier is reflected on a scale from 0 to 100, score of 0 represents the lowest performance and that of 100 represents the frontier.

Nepal is a land-locked country bordered with countries that have wide coastal areas; it is surrounded by two giants: China is 400+ times larger and India is 112 times larger than Nepal. Besides, the labor force in these two countries is not only disproportionately more skilled, they have world class human capital, especially in high-tech, science, math and engineering. They are less corrupt economies; they have more favourable rules for conducting business and rank high in competitiveness than Nepal. They have infrastructure that the world has to envy (in case of China) and improved substantially over time (in case of India). They also have more flexible labor market and less strikes and closings than in Nepal. Amidst this anti-business climate, it is almost impossible to imagine, why entrepreneurs or foreign multinationals who want to play by rule will ever invest in Nepal as long as India and China are welcoming them.

46 Compared to the leader in each category, Nepal is 66% more corrupt; 34% more difficult for doing business, 35% less competitive and 33% more costly for business starts up. When we combine those four indices (simple average) we find that the business environment in leader countries is 34% more conducive than in Nepal. Using the same method, we find that the business environment is 16% more conducive in China and 10% more conducive in India.
However, policy could make the difference. Some constraints such as market size (to some extent) and land-locked situation cannot be removed but the severity of their impacts can be eased by eliminating corruption, respecting rule of law and putting a brake in the culture of siphoning public funds into private hands. However, it may not happen easily as the status quo in both formal and informal set of rules has been instrumental in capturing rent for party members. Nepal is trapped in feudal-rentier equilibrium.

6. G. Infrastructure: living with ironies and irresponsible optimism
Water is everywhere but in kitchen; hydro is for talk not to walk; cell phones are in abundance but no electricity to charge them; there is a cry for more tourists but those already in Nepal cannot get flights to visit scenic places; politicians are never tired of touting for “self-esteem” but seek foreign aid even in fixing a small broken road. One can add so much more ironies and chaos on this list of Nepal’s state of infrastructure. Clearly, the infrastructure sector, whether it is city road, long distance road, airport, irrigation facility, electricity generation are mired with neglect, deficiencies and mismanagement. The parties' Platforms are full of promises such as building roads (four highways from southern to northern borders, an additional East-West highway through hill), railway from Tibet to Lumbini, housing guarantee for 500,000 households, construction of ropeway, international and regional airports and large irrigation facilities. These are just the tips of the iceberg. They promise something big, without explaining why these facilities are needed; why they should be priority and how to achieve them. If one wants to do the costing of the promises made, the amount of financing that is required would be even more imaginary and astronomical than economic growth targets that we discussed.

I will not deal with all sub-sectors in infrastructure but will briefly discuss the issue of hydro power. Electric power is the most important input for production activities and also for household consumption. Lack of electricity and its high price is one of the main reasons for making Nepal a high cost economy. So far Nepal has total production of about 700 megawatt of electricity, mostly from hydropower. The total demand is estimated to be about 900 MW, with excess demand of 200 MW.47 However, as almost all projects are of run-of-river types, full

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47 This is another story that Nepal’s demand for electricity is a suppressed demand either because it is not reliable or because it is not affordable or because it is relatively more expensive than other sources of energy. Surprisingly, only 2.3% of total energy consumption in Nepal is from electricity and 86% is from traditional sources such as fuels, agriculture waste and animal dung (Ministry of Finance, 2013).
capacity is possible only in rainy season and in dry season, the production is about 500 MW. As a result, there is about 12 hours of load-shedding in dry season. This is a country which cannot add even 150 MW of electricity per year (despite the fact that whatever is generated is mostly by foreign aid) which would eliminate load shedding, and needs investment of only Nepalese rupee (Rs) about 45 billion, 2.6% of Nepal’s GDP.

But the parties are promising big: UCP targets to increase hydro power by 10,000 MW in ten years, by 25,000 MW in 20 years and 45,000 MW in 40 years (UCP, pages 35-37). UML does not have targets, but it mentions the names of the rivers that would be utilized for electricity in the next 10 years (UML, page 32-33) and the list of the rivers is very similar to what UCP proposes, indicating that UML’s target is as high as that of UCP. NC has the target of generating 5,000 MW in the next five years (NC, page 42). Back of the envelop calculation shows that to generate 10,000 MW, Nepal needs to invest about 90% of its GDP in 2012. This is just for electricity generation. Consider adding the cost of transmission and distribution, you have enormous amount of investment needed. It is like allocating at least 10% of GDP for the next 10 years or 40% of total government expenditure. To have some perspective, right now the government’s expenditure to hydro is about 2%.

**Issue 1. Lacking homework.** The most frustrating part in Nepal is that there is hardly any academically informed serious debate on any policy issues. Always, there are more assertions than proof, activism than thoughtfulness, and rhetoric than reality. Take the case of hydro-electricity. All the three political parties are of the opinion that hydro-power is plenty and is panacea (white gold) for all Nepal’s ails. Same goes with other commentators and researchers in Nepal. In newspaper, you often read that Nepal has comparative advantage in generating hydroelectricity compared to India and China. We also hear that if water resources managed properly, Nepal will leave its neighbours far behind in taking advantage of water resources. So goes the optimism! However, I was unable to find a single paper that directly or indirectly deal with these issues.

But more fundamentally, why Nepal needs so much electricity? What the economic rationales are for making these targets? Are we thinking of domestic market or export markets? If it is the latter, how certain we are that we will have lower cost of production vis-à-vis other set up to support exports? What are the rationale for making such a capital intensive and almost zero

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48 I have used the project cost of Nepalese Rupee 150 million per MW.
labor absorption projects in the pipeline? There are host of other questions that we should be studying thoroughly before we take massive undertakings. I just took hydro-electricity as an example, the same applies with other infrastructure development, such as roads, ropeway, bridges, irrigation canals, airports. Nepalese should sincerely do their homework before blaming others for their laziness, rent-seeking activities and incompetency.

7. Charting A Way Forward!

In the Election Platforms of recently held Constituent Assembly/Parliament election, three major political parties in Nepal, Nepali Congress, United Marist-Leninist and United Communist Party (Maoist) have promised a MOON to the people if they form the government. In the election pitch to attract voters, all three parties have come with double-digit growth agenda to increase per capita income for the next one/two decades by 10%. The rhyme of the word “double-digit” might be the motivating factor that the growth targets of the three major political parties’ converge towards that level. By world standard, double-digit growth rate on a sustained basis for a decade or so is still “too high to achieve”. The Nepalese political parties aim to break this record! Never mind that Nepal’s per capita income has grown by less than 2.5% in the last one/two decades. Moreover, they have “promised” many goodies in each sector of the economy, without taking any pause on costing these programs, giving the impression that if they are elected they would have the magic stick of generating revenue needed for those programs. 

Worse, the programs that they identify are not even the ones that would address the most urgent and pressing issues of economic growth and development in Nepal. They are collection of hodgepodge wish lists without any link among objectives, policies and outcomes. In the paper, I have analyzed their growth agenda in detail. The drastic acceleration of growth—as the parties have claimed to achieve—requires drastic policy actions that release, energize and stimulate all forces of economic growth. It requires more and better use of inputs such as higher level of employment and higher level of per worker production (labor productivity). The goal should be to create full-time and higher paying jobs—means increasing labor productivity—for the labor force. Labor productivity can be increased by increasing capital per worker, number of educated work force, number of years in schools, and number of ideas and making people engaged in innovative activities. Furthermore, to achieve higher labor productivity, a country requires better macroeconomic policies, higher trade orientation, better production techniques and institutions
that reward hard work and penalize corruption. Parties’ Platforms fail to give any indication that the parties understand the growth mechanism and actual problems that the country is facing.

They promise MOON because it does not cost them, as there is no tendency to have litmus test on politicians’ promises and make them accountable for failings. Nepal cannot attain annual per capita growth of 10%; it simply does not have the political determination and economic forces that fill these feet. But that is not the end of the world, even half of that growth rate on a sustained basis combined with right set of distribution policies, including education, could bring tremendous positive changes. However, the reality is that even the 5% growth rate is unattainable mainly because of the mindset of the political parties and the perverse policies they create. The monarchy—major institutional obstacle to growth—has been abolished, but the more draconian psychological obstacle—corrupt mentality of political leaders akin to deposed royalists—triumphs. The party leaders consider themselves above the law, want somebody else to earn their living, and hate to be accountable to the public. This feudal-rentier mentality is a major obstacle to attaining higher economic growth.

Nepal is in low level equilibrium: with low investment, low human capital, low domestic knowledge to absorb globally available technology, and undeveloped and rotten infrastructure. It is trapped by growth-impeding and inequality-enhancing institutions, pervasive political bickering, deep run psychology that harasses curiosity and hopefulness and complete convergence of political parties in rent-seeking. Hence, the need for drastic policy changes cannot be more urgent. As discussed in the paper, the following 15 are he major issues that Nepal needs to address to accelerate economic growth and have equitable distribution.

1. Unemployment rate, which stands at about 22%, is a major drag on growth causing enormous social loss.

2. Nepal has turned from a supplier of mercenary soldiers to a supplier of workers in merciless foreign land. One-quarter of all male and female youth and almost half of all male youth of ages 20-39 are in foreign countries as manual workers.

3. Most of the government revenue is used for consumption and whatever is invested is mostly on state-owned enterprises that are chronic losers. In a single year in 2012, the combined loss of Nepal Electricity Authority and Nepal Oil Corporation was about Rs 20 billion, one-third of what government spent on entire education sector in that year.
4. Because of wrong economic policies, most of private investment is made in wealth transfer (not wealth creation) and services duplication (not services expansion)—the activities that do not add to social productivity.

5. Land rent is the prime killer of all incentives in the country.

6. Foreign aid is not helping Nepal’s development, what is needed is foreign direct investment but it will be a tough uphill battle for Nepal to be able attract FDI.

7. Government is distorting incentives by meddling into those sectors where market would work efficiently and abandoning those where market fails and government intervention is need. Economic growth is both about releasing the forces of growth from the hands of government and increasing the role of government.

8. Majority of workforce in Nepal is functionally illiterate, and growth requires that they be given proper opportunity/training to be part of the production process.

9. The inefficiency in education system is horrifying. Only 3.6% of those that started grade 1 in 2002 completed SLC in 2011 without failing. With recent promotional rates, only 11% students that had enrolled in grade 1 in 2011 would pass SLC in 2020—89% failure on the way—wastage of unimaginable magnitude.

10. Education system has increased inequality, just opposite to what a successful nation aspire to achieve through education. Nepal is a country where equality of opportunity—children of lowest income families to have almost equal chance to move to the highest income brackets in adulthood—is ridiculed to the extreme.

11. Nepal lacks innovation activities in every field. Even more broadly, this is the country where curiosity—the most vital force for society’s advancement—has dwindled in all professions, from politics to teaching to scientific research. Decades of deception by politicians, stagnation and mismanagement have eroded the curiosity.

12. Exporting is a relatively difficult proposition for Nepal, where exports are not enough even to pay for 80% of fuel imports. Had there been no remittances, Nepal’s exports for a year cannot pay for more than 3 months of imports.

13. Economic rents and rent-seeking activities are pervasive in Nepal, reducing the size of economic pie (inefficient) and raising economic inequality (inequitable).
14. Because of its rentier activities, Nepal is a very costly country to conduct business. It has cost which is 42% higher than the most business friendly country in the world, 23% higher than that of China and 15% higher than that of India.

15. Nepal lacks sound policy making when it comes to harnessing natural resources and other infrastructure development to the extent that assertions and activism triumph over rigorous and fundamental analysis.

The parties promise things that are beyond their control but ignore what are under theirs. They pretend of charting a million mile march—attaining never realized growth rate in the world—but fail to take the first step of establishing Rule of Law, bringing corruption under legal scrutiny in a steadfast way, eliminating bureaucratic red-tape, allowing businesses to operate freely, and protecting private property from street hooligans. There is not much hope that the parties will take the first step, as they are blinded by narrow self-motive and large discount factor. Take two pieces of information, in any country: average politicians are richer than average population, and there are no poor politicians in rich countries. Therefore, almost as a rule, as Nepal starts the path of prosperity, its politicians would be richer than ordinary Nepalese and they would be so faster. However, the bump is that Nepalese politicians want to be rich, not with other compatriots and not tomorrow, alone and now. The only way to do so, in their mind, is by extracting rents using inefficient policies that reduce the pie of the economy.

In this effort of rent grab, parties are spreading their nets, resulting in too much politicization from tea-shops to schools to community to book-store to restaurants. There are numerous political parties (203 provided candidates in the recent CA elections). Most political parties have sister organizations, different for student (schools and university), teachers (primary, lower secondary, secondary), professors, peasant, women, youth, restaurant workers, transport workers, industry workers, writers, scientists, engineers, lawyers, government workers, intellectuals (called Buddhijibi—those who live by selling brain and are designated by parties as ones). Then there are sister associations based on geographic regions (for the same national parties). Lot of resources have been wasted in attending those meetings and spreading the net in a competition to be the first to recruit a person in own party. No doubt, the politicisation has helped to address some of the injustices and absurdities by making people aware of their rights, but it has gone too far. The antagonism and unnecessary conflicts between people associated with different political parties has been an obstacle to growth.
Unlike political change, economic growth and development is not one time miracle that happens over night; it is path dependent—where a country is today depends very much on where it was in the last few years. Economic change is not an outcome of wishful thinking; it is driven by policies—policy dependent. Below, I propose 12-point policy recommendations which—if implemented as a package—can turn Nepal into a high performing, just, prosperous and dynamic nation. Unless there is voters’ pressure coming from the grass root level, the parties will not implement these actions, but let us hope that, this time around, Nepalese voters are not ready to accept anything that does not have tangible economic change which has remained elusive throughout history.

1. Lower corporate tax rates and maintain higher tax rates for sectors that are protected from international competition such as urban land, houses, education and health. Keep the urban land and houses property assessment in par with market value, substantially increase property tax rate; let the local institutions collect property tax and use part of it as education fund. For each household, make one house as primary resident and houses more than one should be considered as investment property and all capital gains should be taxed.

2. Implement land reform and develop a legal framework for commercial farming.

3. Get rid of bankrupt SOEs. Unless it is generating net income (over cost) and there is case of natural monopoly, there is no reason why government should form SOEs. Make government program growth-oriented such as providing infrastructure, maintaining level playing fields and energizing local resources.

4. Stop taking foreign aid unless it is for a humanitarian cause.

5. Identify sectors that are not allowed for foreign investment and sectors that are not allowed to have foreign majority ownership. For the rest of the sectors, treat investment from any parts of the world and from any nationality equally. Do not provide tax concession only for NRN, doing so will discriminate against the huge pool of capital in the international market.

6. Make education compulsory and make sure that in the next ten years 95% of students enrolled in grade 1 complete SLC without failing. Make provision that students can take education either in Nepali or English (of their choice). Do whatever it takes to make sure that the percentage of students that completes SLC with Distinction and First Division in public school is at least as high as in private schools. Also, the Top 10% students that complete
grade 12 should be at par with top 10% students in China and India. Arrange vocational education for students after grade 10 designing courses in consultation with industries.

7. Make a target of increasing exports that satisfy two conditions: (i) 0.33% of combined imports of China and India and (ii) 40% of GDP.

8. Within the next three years, incorporate policy changes so that Nepal's score on corruption, ease of doing business, day of filling documents for trade, cost of start-up business and global competitiveness are at least as good as those of China and India. And in next 10 years, it will be one of the leaders in scoring better in these issues.

9. Create an entrepreneur / innovation center that work in collaboration with industry and university. It should be designed in such a way that people inside the country and Nepalese expatriates can contribute.

10. Make all redistributive and employment policies income-based not race, language, and ethnicity based. Target poverty not individuals of particular trait. Stop subsidizing oil, gas and electricity. If needed, provide direct subsidy to the low-income people.

11. Make provinces north-south and do not block the free mobility of labor, capital and inputs across provinces (see Acharya 2007, 2012a and 2012b).

12. Make a provision that parties that run for provincial elections are different from parties that run for federal election; they must maintain different bookkeeping, and different symbols. Make the provision that local elections cannot be run under political banners.

References


___________. “Nepal’s State Restructuring: Inserting Economic Agenda”, April 2012b


Ministry of Finance, Nepal. “Budget Speech 2013a”.


Appendix A: Derivation of labor productivity equation

Start with a simple production function where output ($Y$) is a function of physical capital ($K$), labor ($L$), human capital ($H$) and level of technological and economic efficiency ($A$), all in time period $t$.

$$Y_t = K_t^\beta_k L_t^\beta_l H_t^\beta_h A_t$$

where $\beta_k$, $\beta_l$ and $\beta_h$ is the shares of physical capital, labor and human capital in national income. Broadly speaking, A is determined by (i) economic efficiency and (ii) ideas (technological progress). Economic efficiency is determined by factors such as (i) international trade (ii) economic policy (iii) institutions and (iv) infrastructure. Ideas (technological progress) are like formulas or blueprints that are required to produce goods and services by workers and machines.

The first three inputs in the RHS of (A1) are rival goods. But A is nonrival good: two or more producers can operate under the same economic efficiency or use the same formula at the same time. Economic efficiency and technology differ across time and across countries. Taking log on both sides, (A1) can be written as

$$\ln(Y_t) = \beta_k \ln(K_t) + \beta_l \ln(L_t) + \beta_h \ln(H_t) + \ln(A_t)$$

This relation shows the level of GDP but when we say countries as rich and poor what we are comparing is per capita income or consumption not level of GDP. We convert the model in per capita terms by dividing both sides if equation (A2) by log of L

$$\ln(Y_t/L_t) = \beta_k \ln(K_t/L_t) + \beta_l \ln(L_t) + (\beta_h - 1) \ln(L_t) + \ln(A_t)$$

We make a reasonable assumption that the production function has constant returns to scale, meaning if all the three rival inputs are changed by a certain scalar, GDP changes by the same scalar. This assumption implies $\beta_k + \beta_l + \beta_h = 1$, and the second last term in (A3) vanishes. Replacing $A$ by its two components, economic efficiency and ideas, and replacing economic efficiency by its four factors mentioned above, equation (A3) can be written as

$$\ln(Y_t/L_t) = \beta_k \ln(K_t/L_t) + \beta_l \ln(L_t) + \beta_h \ln(H_t) + \ln\left[\text{institutions + economic policy + trade + infrastructure}\right] + \text{ideas}$$

where $Y_t/L_t$ is output per worker; $K_t/L_t$ is capital per worker and $H_t/L_t$ is human capital per worker. This is equation (2) in the text.

Appendix B: Saving, investment and balance of payments

For an open economy—that do transactions with the rest of the world—the value of final goods and services produced within its political boundary within a year, called, gross domestic product (GDP), is the sum of private consumption (C), total investment (I) and government consumption (G), exports of goods and services (X) and imports of goods and services (M). In notational form, the basic identity can be written as

$$\text{GDP} = C + I + G + X - M$$

$C + I + G$ is called gross national expenditure (GNE), total expenditure made by nationals of a country on final goods and services in a year. The difference between $X$ and $M$ is trade balance (TB). If there were no movement of factors of production (capital and labor) except trade (across countries), then GDP (produced within a country) would be the same as gross national income (GNI—income earned by nationals of a country). Otherwise GDP and GNI differ by the amount of net factor income abroad (NFIA). Foreigners make payment to domestic capital and labor that are in use in foreign countries which must be added as income to nationals and GDP paid to capital and labor owned by foreign entities within the country must be subtracted to receive GNI. Denoting the difference of these two streams by NFIA,

$$\text{GNI} = \text{GDP} + \text{NFIA}$$

Furthermore, domestic entities might give their income away or receive income in the form of gifts, foreign aid and remittances. They are considered non-market transitions, and are referred to as unilateral transfers, as they flow in only one direction, as opposed to other items where traded items go in one direction and payment goes in another direction. The value of unilateral transfers a country receives from the rest of the world—ROW—minus those it gives to the ROW is net unilateral transfers (NUT). The gross national disposable income (GNDI), the total resources available to the home country, can be defined as follows:

$$\text{GNDI} = \text{GDP} + \text{NFIA} + \text{NUT}$$

Saving and investment

The saving-investment relation can be derived using equation (B1) which can be written as

$$\text{GDP} - C - G = I + TB.$$
The left hand side expression—the difference between what is produced and what is consumed within a
country—is equal to domestic saving, \( S^D \). Hence,

\[
B5. \quad S^D = I + TB
\]

By adding NFIA and NUT on both sides of equation (B4), we will have \((GDP + NFIA + NUT) - C - G = I + TB + NFIA + NUT\). Using equation (B3), it becomes \( GNDI - C - G = I + TB + NFIA + NUT \). The left hand side expression is national saving (\( S^N \)), as opposed to \( S^D \), as \( GNDI \) is total, not domestically available, income to nationals. Hence we have

\[
B6. \quad S^N = I + TB + NFIA + NUT
\]

In the BOP account, \( TB + NFIA + NUT \) has a special name, called, current account (CA). Therefore,

\[
B7. \quad S^N = I + CA
\]

Take equations (B5) and (B7). Since I is the same in both equations, by substituting the expression for I in

\[
B8. \quad S^N = S^D + NFIA + NUT
\]

The difference between the national and domestic savings is the sum of NFIA and NUT. This makes an
assumption that all NFIA and NUT is saved not consumed, otherwise domestic (national) saving will be
 underestimated (overestimated). In Nepal, NFIA is negligible, but NUT which compromise mainly of (i) remittances
and (ii) foreign aid is substantial.

To understand how investment can be financed, we can substitute (B8) into (B7), such that

\[
B9. \quad I = S^D + NFIA + NUT - CA
\]

As CA is sum of TB, NFIA and NUT, equation (B9) is basically equation (B5) which shows that investment
ultimately depends on two things: domestic saving minus TB.

Furthermore, we can convert total savings into private and government savings by just adding and
subtracting government revenue (R) from the saving equations (B4) and (B6). GDP – C - G can be written as \((GDP – C – R) + (R – G)\), where GDP – C – T = private domestic saving \( S^P \) and R-G is government saving, \( S_g \) (positive if budget is in surplus and negative if in deficits). Similarly, \( GNDI – C – G \) can be written as \((GNDI – C – R) + (R – G)\), where \( GNDI – C – T \) = private national saving. Using this decomposition, equation (B9) can be written as:

\[
B10. \quad I = S^P + S_g + NFIA + NUT - CA
\]

To recap, the last three components on the right-hand side in (B10) are negative of TB and the sum of first
four components on the RHS is the measure of national saving.

**Incorporating foreign investment, borrowing and lending**

So far in the discussion, I have not incorporated the foreign investment and borrowing and lending? In other words,
onece we have CA nonzero, how is it balanced out? Equation (B3) represents only income resources that are
available to a country obtained from market sales and purchases of goods, services, and factor services and
nonmarket transfers. But a country’s expenditure (GNE) can be different from its income (GNDI) by being engaged
in net sales or purchase of assets, that is, borrowing from or lending to other countries. Though capital account
(KA) and financial account (FA) report such assets transactions, as KA is a very small component in any country's
BOP account, we will focus our discussion on FA. Asset (long term investment, stocks, and bonds) transactions
across countries are dealt in FA. Once we include these two accounts, equation (B3) can be written as:

\[
B11. \quad GNDI = GNE + TB + NFIA + NUT + KA + FA
\]

As a country's GNDI (income) should be equal to GNE (expenditure) and the sum of TB, NFIA and NUT is
CA, equation (B11) implies that

\[
B12. \quad CA + KA + FA = 0
\]

Ignoring KA, equation (B12) implies that CA and FA must be opposite in sign and equal in magnitude (CA
= -FA). Entries in FA are positive if money flows inside the country, meaning foreigners are investing (acquiring
domestic assets), that is, home country is borrowing. Entries in FA are negative if home country is investing in
foreign country (lending to foreign country), an asset for home country. The net FA equals the additions to external
borrowing (liabilities) minus addition to external lending (assets). It is positive for a net borrower (or net receiver of
foreign investment) and negative for a net lender. Since the foreign investment and loan has to be paid in the future,
FA can be considered as change in net foreign assets (NFA) or change in external wealth of a country.

\[
B13. \quad CA = -FA = \Delta NFA
\]

Going back of investment equation, we can write it in several ways such that

\[
B14. \quad I = S^D - TB \quad \rightarrow I = S^N - CA \quad \rightarrow I = S^N + FA \quad \rightarrow I = S^N + \Delta NFA
\]