

The Service Element in National Accounts: A Preliminary Basis for an Alternative Formulation

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The *raison d'être* of this article is to focus attention on an awkward corner in the emerging growth pattern of GDP—the disproportionate growth and the weight of the service element, which has important implications for the character and structure of economic growth. The suggested alternative will be serviceless GDP so as to delineate real growth from spurious growth.

CONCEPTUAL BACKGROUND

The System of National Accounts (SNA) developed mainly out of the need to furnish the Keynesian macro system a suitable statistical support [3, p.2; 15, p.418]. Keynes identified deficient effective demand as the source of underemployment equilibrium. Assuming existence of excess capacity, operationality of investment multiplier and stability of private consumption function, service elements like civil works, military spending and even digging and filling of holes would set off the multiplier effect required to boost up effective demand. The Keynesian thesis and the concomitant national accounting concepts do not fit into an underdeveloped economic structure. The critical economic issue here is not effective demand deficiency, but constraints and bottlenecks experienced on the aggregate supply side. Keynesian assumptions of the existence of excess capacity and the operation of multiplier are invalidated by the objective economic conditions in under-developed economies. There does exist an underemployment problem of substantial magnitude, but it differs in a qualitative sense. Its solution requires management of the aggregate supply and structural shifts within the nonservice or commodity production sector. In these countries, therefore, there is need for a different national accounting base.

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Further development of SNA has proceeded in the directions of improved measurement of nonmarket activity to facilitate inclusion in GNP and adjustments for amenities and disamenities of modern life to bring GNP close to a welfare measure.¹ Thus, the Kendrick-Eisner-Ruggles theses have suggested inclusion of imputed values of nonmarket activities like the work of a housewife, the service flows of consumer durables, etc. [14]. The Nordhaus-Tobin MEW² (Measure of Economic Welfare) is the pioneer effort towards correcting GNP for pollution, leisure, environmental quality, etc. [17]. These theoretical advances in SNA are a reaction to the unbridled pursuit of GNP growth as an objective function since the advent of Keynesianism. Aggregatively and on a per capita basis, GNP has been the dominant economic theme in the capitalist world until the sixties. Economic significance was judged, and future policy aims determined, in terms of GNP shares. In the seventies, GNP has come under heavy fire. While in the developed capitalist world, the concern with GNP growth has led to the fears that the limits to growth may soon be reached on this finite earth [12, 13], the underdeveloped world blames it for the prevailing social instability.

In an underdeveloped structure, emulation of MEW-ism may be as dangerous as that of GNP-ism. A new development strategy ought to be worked out, with employment and socio-care replacing GNP as objective function [2, 9, 21]. But it must also be consistently modelled on the peculiar objective conditions of an underdeveloped economic structure. The MEW welfare concept is essentially characterised by a high income elasticity of demand.³ This is where the concept fails an under-developed economic structure. What is most relevant for the purposes of the present paper is another set of problems. In terms of policy specifics, a welfare-biased strategy of development implies an expansion of services. Similarly, any method of adjusting national income for a welfare orientation implies a greater service share. It must be self-evident that the problem of measurability will present itself in a much more complex manner in the less developed countries with poor statistical capability than in the developed countries.

THE PRODUCTION BOUNDARY

Pakistan follows the System of National Accounts (SNA), prepared by the United Nations for the use of under-developed countries [22, 23]. The SNA designs a production boundary, with all market activity lying inside and most nonmarket activity outside. Pocket-money type transfers are considered nonmarket and hence excluded. Also excluded is intermediate market activity to avoid double-counts. On these bases, the primary and secondary output qualifies to fall within the production boundary. In terms of Pakistan's national accounts, the production boundary embraces these commodity producing

¹In the Keynesian zeal to overthrow the Pigovian employment theory, the Pigovian welfare too formed part of the "Kill".

²Samuelson has used the same measure to invent his NEW (Net Economic Welfare) [20, pp.195-96].

³It will be interesting to note that, at the Stockholm Conference on Environment and Quality of Life, the representatives of the underdeveloped countries had pleaded for more pollution, which is an outcome only of higher levels of industrialisation. To quote Lekachman: "As a target, amenity assumes general affluence. . . . One does not speak of amenity to starving people" [11, p.140].

sectors: agriculture, composed of sub-sectors like major crops and minor crops; manufacturing, composed of large-scale and small-scale sub-sectors; and mining and quarrying.

The problem arises when the production boundary is stretched to incorporate the service sector, defined in *The Pakistan Economic Survey* as "other services" and "construction services". Included in services, apart from construction services are: electricity and gas distribution services, transport and communication, wholesale and retail trade, banking and insurance, ownership of dwellings, public administration and defence. Also included are the services of persons belonging to professional classes like educators, doctors, lawyers, barbers, launderers, hotel and cinema employees.

The description of "construction services" as part of service sector can become a bone of contention. Until 1973-1974 this sector was categorised as "construction". The nomenclature of "construction services" was adopted in the following year. This is a recognition of the fact that the dividing line in case of this sector is not strictly determinable. Included in it are all types of construction activities such as repair, maintenance, demolition, as also the public, private and household activity and flood relief spending. The present basis of its estimation is the availability of cement, both for urban as well rural construction [18]. As such, it has all the weaknesses of a uni-factoral computation.⁴ In any case, the principal inputs of construction such as cement, bricks, steel, stone, wood, etc. are counted as the output of the relevant industries in the nonservice sector. Thus, this sub-sector represents only an intermediate activity.

Electricity and gas distribution sub-sector relates to generation, transmission and distribution of electrical energy and gas transmission and distribution. Railway, road and air transport, postal, telephone and telegraph services and storage come under the transportation, storage and communication sub-sector. It also includes sea-borne transport. Energy, transport and communication are intermediate elements in the process of production in the non-services sector. If the cost functions of user nonservice activities take into account the inputs obtained from these sub-sectors, their inclusion may only amount to double counting.⁵

Banking and insurance sub-sector is composed of banking institutions, cooperative credit societies, cooperative banks, financial corporations and insurance companies. It does not include real estate agencies as no information is available in regard to them. Provisions of funds by this sector is a service to the productive process, and not an act of production itself.⁶ Rental incomes are counted under the sub-sector of ownership of dwellings. Self-occupied

⁴Working Group on Improvement in the Estimates of value-added in the Non-agricultural and Non-industrial sectors recommended that, instead of the single input approach, the coefficient of value added should use other inputs also.

⁵Some economists treat transport as intermediate activity [3, p.11].

⁶Juster talks of market-type activities, like self-consumption of food by farmers and "the value of financial services rendered by banks in situations where legal prohibitions prevent a market price emerging of its own accord" [14, p.29]. While the relevance of the former in case of Pakistan with a sizeable subsistence sector is undeniable, the latter assumes a service-dominated economy like the United States.

dwellings, despite being a nonmarket category, are considered to be falling within the production boundary.

The wholesale and retail trade sub-sector consists of the incomes of those engaged in trading agricultural and industrial goods, domestic as well as imported. Trade in domestically produced goods generally follows the growth in the nonservice sector, other things being equal. So the number of times a particular good changes hands, in a chain of mark-ups or margins, is of no significance to real growth in primary and secondary output. However, in times of investment uncertainty, the co-existence of brisk wholesale and retail trade and sluggish industrial activity is not unusual. Counting this as value added cannot but introduce an irrationality in the national accounts.

It is, however, in the Government sector that the standard criteria of inclusion in the production boundary breaks down. The difficulties arise in case of civil administration, military spending and social sectors. In Pakistan, these three are lumped together in the sub-sector of "public administration and defence", with wages and salaries of government employees measuring the value-added in this sector. The distortion of treating government as having contributed to national income is tolerated for a supposedly "better view of total resources that are available, whatever use they may have been put to" [6, p.46]. This is a very loose concept of resources. Real resources are generated only in the nonservice sector, and a government just eats up its redistributive share. Its own generation capacity is confined to "creating money", which it does quite often, only to inflate its claims on the value added in the nonservice sector. Such manner of adding "value" may leave the orthodox national accountant with a bigger cake, but the society's view of its available resources will have been thoroughly distorted in the meanwhile. Simon Kuznets, the most authoritative national accounts analyst, holds the view that Government activity is in no way analogous to economic capital, variations in which should be reflected in the flow of national product.⁷

Defence is a nonmarket category. But it is not an intermediate category either, in the sense of having been counted in the nonservice sector. On the contrary, it is considered to be final output,⁸ included in production boundary out of the fact of being a "regrettable necessity"⁹ [7; 8]. However, defence cannot pass the test of direct participation in the production process. As for the salaries disbursed in this sector, these are just another redistributive claim on the output of nonservice sector. In case of regrettable necessities, it is interesting to note that exclusions and inclusions are made for the same reason. For instance, both defence and commuting to workplace are regrettable necessities. While the former is included in national accounts the later in many cases is not. Which only creates the doubt that the national accountant is not necessarily

⁷... "the flow of services to individuals from the economy is a flow of economic goods produced and secured under conditions of internal peace, external safety, and legal protection of specific rights and cannot include these very conditions as services" [10, pp.193-94].

⁸Anisur Rahman makes the interesting observation that doubling of defence activity does not necessarily imply doubling of "quantity" of security. The latter has a specific international dimension, ruling out its inclusion in national product as a conventional measure of final output [19].

⁹Introduced by Ruggles and Ruggles the term "regrettable necessities" now frequently appears in the literature as an alibi for most puzzles in national accounts [14].

governed by a scientific criteria: the relative ease of the availability of information has its own role to play.¹⁰

So in an underdeveloped economic structure, the production boundary will be realistic only when it coincides with the non-service sector. Direct and meaningful economic information flows out of agricultural and industrial activities only. Service sector is generally assumed to grow in line with population growth and the growth in commodity production sectors. Its frame of reference is furnished by the nonservice sector. From the standpoint of real growth it only inflates figures without adding any directly useable information.

SERVICE-PUSH GROWTH

The source of basic data processed in this article is the historical series of national accounts appended to the *Pakistan Economic Survey* for 1976-1977. This choice is governed by the compositional depth, time-comprehensiveness and a more rational apportionment of unallocable joint products and services between erstwhile East Pakistan and what is now Pakistan compared to alternative series [16]. GDP concept approximates to the summation of value added at each stage of production. As defined in the previous Section, the alternative production boundaries are: SNA-GDP—This is service inclusive, prepared on SNA pattern, and employing a mix of product, income and expenditure methods for computation; S-GDP (Serviceless GDP)—This is given by conventional GDP minus services, employing the product method alone, with services defined as the universe of noncommodity "output".

Table 1 shows that during 1949-1950 to 1975-1976, Pakistan has experienced what can be described as a service-push in GDP growth. The analysis of the time series of GDP growth at constant factor cost for the period throws up a fundamental proposition: rate of service growth has generally exceeded the rate of growth of SNA-GDP, and the rate of growth of SNA-GDP has generally exceeded the rate of growth of S-GDP. In other words, both SNA-GDP and S-GDP have trailed behind services in terms of growth. What is more important, the divergence between service growth and S-GDP growth is relatively more pronounced than the divergence between service growth and SNA-GDP growth. Table 1, smoothened by moving average method, brings out these tendencies.

The service-push in GDP growth shows up significantly in other indicators as well. As will be seen in Table 2, the overall growth of services for the period 1949-1950 to 1975-1976 was registered at 312.4 percent, which is higher than the corresponding growth of 218.9 percent of SNA-GDP, and much higher than 159.6 percent growth of S-GDP. On an annual compound basis, the growth rate recorded by services comes out far higher than the growth of S-GDP, i.e. 5.6 percent compared to 3.7 percent. Relatedly, SNA-GDP also lagged behind, with the annual compound rate of growth at 4.6 percent. In per capita terms, services roughly outweighed S-GDP four-times and SNA-GDP two-times. The respective growth is estimated at 104.4 percent, 28.4 percent and 57.8 percent. Per capita services enjoyed an annual compound growth rate of

¹⁰The Nordhaus—Tobin MEW excludes defence, as it has no direct bearing on welfare [17].

Table 1

GDP Growth at Constant Factor Cost Percent

	Services	S-GDP	SNA-GDP	Nine-Year Moving Average of		
				Services	S-GDP	SNA-GDP
1950-1951	4.5	3.5	3.9	—	—	—
1951-1952	5.8	-6.7	-1.8	—	—	—
1952-1953	1.8	1.7	1.7	—	—	—
1953-1954	3.9	13.5	9.4	—	—	—
1954-1955	4.8	1.4	2.8	4.2	2.9	3.4
1955-1956	3.4	3.6	3.5	3.8	2.6	3.0
1956-1957	3.0	2.9	3.0	4.0	3.6	3.8
1957-1958	2.8	2.3	2.5	4.3	4.3	4.3
1958-1959	7.5	4.1	5.5	4.7	3.6	4.0
1959-1960	1.0	0.8	0.9	5.1	4.0	4.4
1960-1961	8.1	2.6	4.9	6.2	4.3	5.1
1961-1962	3.6	7.8	6.0	7.4	4.3	5.6
1962-1963	7.9	6.7	7.2	7.1	4.6	5.7
1963-1964	8.7	4.8	6.5	6.6	5.3	5.8
1964-1965	13.2	6.5	9.4	7.3	5.8	6.4
1965-1966	13.5	2.8	7.6	7.5	6.6	7.0
1966-1967	0.4	5.5	3.1	7.3	5.6	6.3
1967-1968	2.9	10.1	6.8	6.5	5.0	5.6
1968-1969	7.6	5.6	6.5	6.8	4.9	5.7
1969-1970	9.4	10.1	9.8	6.3	4.7	5.4
1970-1971	2.3	-1.7	0.1	5.4	4.2	5.4
1971-1972	0.8	1.0	0.9	5.9	3.9	4.8
1972-1973	10.7	3.9	7.0	—	—	—
1973-1974	9.0	4.9	6.8	—	—	—
1974-1975	5.8	-1.6	1.9	—	—	—
1975-1976	4.5	3.1	3.8	—	—	—

Source: Appendix Table 1.

Table 2

Trends in GDP Growth 1949-1950 to 1975-1976

	Services	SNA-GDP Percent	S-GDP
Overall growth	312.4	218.9	159.6
Annual Compound Rate of Growth	5.6	4.6	3.7
Overall Per Capita Growth	104.4	57.8	28.4
Annual Compound Rate of Per Capita Growth	2.8	1.8	1.0

Source: Appendix Tables 1-2.

2.8 percent, exceeding the growth rate of S-GDP per capita by 1.8 percent, and that of SNA-GDP per capita by 1 percent. In absolute terms, the S-GDP has more than doubled, rising from Rs. 7,583 million in 1949-1950 to Rs. 19,682 million in 1975-1976. Compared to this, the services have managed a four-fold jump during the same 27 years from Rs. 4,815 million to Rs. 19,855 million. As population doubled during this period from 35.31 million to 71.29 million, S-GDP per capita inched from Rs. 215 to Rs. 276 *i.e.*, Rs. 2 per annum roughly, compared to a doubling of services per capita from Rs. 136 to Rs. 278.

SERVICE-LED STRUCTURAL CHANGE

Structural transformation is indicated by the relative sectoral distribution of SNA-GDP. The traditional sectoral classification is given by primary, secondary and tertiary sectors. These include, in that order, agriculture, manufacturing and mining, and services.

The significance attached to these sectors has varied between historical levels of development. Since the advent of settled agricultural societies some ten thousand years ago in the Middle East, the then modern countries were principally characterised by the primary sector. The post-agricultural societies, under the transforming influence of industrial revolution some two centuries ago, have been predominated by the secondary sector. More recently, the major post-agricultural society, *i.e.*, the United States, is said to be making a transition towards the post-industrial era. And this is a state of economic society where the preponderance of services and hence of tertiary sector is clearly discernible¹¹ [4].

If the above yardstick were to be applied to the under-developed economic structure of Pakistan, it leads to a distortion *par excellence*. What indeed is a dominantly agricultural and semi-industrial economy turns out to be a post-industrial society! As is evident from Table 3, the rapid growth of service sector during the last 27 years has pushed up its contribution to SNA-GDP from 38.8 percent in 1949-1950 to 50.2 percent in 1975-1976. Correspondingly, the contribution of S-GDP has declined from 61.2 percent to 49.8 percent. In other words, the service contribution has gone up by 11.4 percent. The contribution of manufacturing and mining went up from 8 percent to 15.2 percent *i.e.*, by 7.2 percent. Together, the rises of 11.4 percent and 7.2 percent in the contribution of services and manufacturing and mining account for the decline in the contribution of agricultural sector by 18.6 percent. This is another way of saying that the contribution of nonagricultural sector during the period has increased by 18.6 percent. However, the lumping together of non-agricultural commodity production with services gives a spurious image of transition from traditional economic activity to the modernising sectors. On the average, during the 27-year period under study, a 1 percent decline in the contribution of agriculture divides into an increase of 0.61 and 0.39 respectively for services and manufacturing-mining. Such a ratio cannot but point up misplaced emphasis in planning for structural change. To begin with higher service growth may well be essential in a primitive economy when it is trying to establish the necessary facilities for production. However, a movement towards

¹¹There is, in fact, a shift from commodity production to relatively stable services [7,8].

service economy from an agricultural state, without at least a parallel development of an industrial and technological base, may be neither possible nor desirable. The discontinuation of SNA-GDP, and its replacement by S-GDP, will steer the planning for structural change clear of an ill-conceived framework by focussing attention on the relevant variables—the inclines and declines in the respective contributions of primary and secondary sectors to S-GDP, or better still, the index of the ratio of secondary to primary output. The policy objective in this case will be to plan for an increasing ratio or the index. Also, this index could serve as the basis for estimating the true rate of structural change. Table 4 attempts these exercises.

Table 3

SNA-GDP at Constant Factor Cost: Relative Sector Shares in Percent

	S-GDP	Services	Manufacturing and Mining	Agriculture	Non-agriculture
1949-1950	61.2	38.8	8.0	53.2	46.8
1950-1951	60.9	39.1	8.4	52.5	47.5
1951-1952	57.9	42.1	9.2	48.7	51.3
1952-1953	57.9	42.1	9.9	47.9	52.1
1953-1954	60.0	40.0	10.2	49.8	50.2
1954-1955	59.2	40.8	11.2	48.0	52.0
1955-1956	59.2	40.8	11.9	47.4	52.6
1956-1957	59.2	40.8	12.2	47.0	53.0
1957-1958	59.1	40.9	12.3	46.7	53.3
1958-1959	58.3	41.7	12.2	46.1	53.9
1959-1960	58.2	41.8	12.4	45.8	54.2
1960-1961	57.0	43.0	13.4	43.6	56.4
1961-1962	57.9	42.1	14.3	43.7	56.3
1962-1963	57.7	42.3	14.8	42.9	57.1
1963-1964	56.8	43.2	15.5	41.3	58.7
1964-1965	55.3	44.7	15.6	39.7	60.3
1965-1966	52.2	47.2	15.7	37.1	62.9
1966-1967	54.0	46.0	16.1	37.9	62.1
1967-1968	55.7	44.3	16.0	39.7	60.3
1968-1969	55.3	44.7	16.3	39.0	61.0
1969-1970	55.4	44.6	16.5	38.9	61.1
1970-1971	54.4	45.6	16.8	37.7	62.3
1971-1972	54.5	45.5	15.9	38.6	61.4
1972-1973	52.9	47.1	16.2	36.7	63.3
1973-1974	51.9	48.1	16.2	35.7	64.3
1974-1975	50.1	48.9	15.8	34.3	65.7
1975-1976	49.8	50.2	15.2	34.5	65.4

Source: Appendix Table 1.

Table 4

S-GDP and Rate of Structural Change

	Percent Contribution of Manufacturing and Mining to S-GDP	Percent Contribution of Agriculture to S-GDP	Ratio of (2 to 3)	Index of (4)	Rate of Structural Change (Percent Change in 5)
1	2	3	4	5	6
1949-1950	13.0	87.0	0.15	100	—
1950-1951	13.8	86.2	0.16	106.7	6.7
1951-1952	15.9	84.1	0.19	126.7	18.7
1952-1953	17.2	82.8	0.21	140.0	10.5
1953-1954	17.0	83.0	0.20	133.3	-4.8
1954-1955	18.8	81.2	0.23	153.3	15.0
1955-1956	20.0	80.0	0.25	166.7	8.5
1956-1957	20.6	79.4	0.26	173.3	4.0
1957-1958	20.8	79.1	0.26	173.3	—
1958-1959	20.9	79.1	0.26	173.3	—
1959-1960	21.3	78.7	0.27	180.0	3.9
1960-1961	23.5	76.5	0.31	206.7	14.8
1961-1962	24.6	75.4	0.33	220.0	6.4
1962-1963	25.6	74.4	0.34	226.7	3.0
1963-1964	27.3	72.7	0.38	253.3	11.7
1964-1965	28.2	71.8	0.39	260.0	2.6
1965-1966	29.8	70.2	0.42	280.0	7.7
1966-1967	29.8	70.2	0.42	280.0	—
1967-1968	28.7	71.3	0.40	267.6	-4.4
1968-1969	29.5	70.5	0.42	280.0	4.6
1969-1970	29.8	70.2	0.42	280.0	—
1970-1971	30.8	69.2	0.44	293.3	4.8
1971-1972	29.1	70.9	0.41	273.3	-6.8
1972-1973	30.7	69.3	0.44	293.3	7.3
1973-1974	31.2	68.8	0.45	300.0	2.3
1974-1975	31.5	68.5	0.46	306.7	2.2
1975-1976	30.6	69.4	0.44	293.3	-4.4

Source: Appendix Table 1.

CONCLUSIONS

The thesis of this article is that services constitute extra fat on the body-economic, the removal of which will lead to rational proportions. The policy towards short-term stability and long-term development essentially involves the physical dimensions and proportions of the nonservice sector. It may, therefore, be in the fitness of things to discontinue SNA-GDP in favour of S-GDP so as to focus policy attention exclusively and demonstrably on key variables and parameters.

What is being suggested is the dethronement of services, not from the economy of society, but merely from the approach towards the computation of national income. Social performance is better judged by appropriately defined non-financial social indicators, supplementing S-GDP. Social statistics, it may be pointed out, are a poor substitute for social indicators. Similarly, other public services truly belong to the budget accounts, and not to the production boundary. The present practice of SNA-GDP may perhaps give way to three distinct, though not necessarily mutually exclusive, matrices—S-GDP for economic flows, social indicators for cultural advancement and financial performance accounts for other community services.

External and internal security create orderly conditions for producing national output, but yield no output of their own to be located inside the production boundary. Although some components of the service sector may pose intricate measurement problems, it is quite likely that defence and public administration are included because of the relative ease of the availability of budgetary information.

An oft-expressed fear is that exclusion of services will drastically scale down national product. For one thing, inclusion of categories lying outside the production boundary does inflate the social product, but only at the cost of analytical clarity and policy effectiveness. For another, S-GDP in Pakistan is significantly underestimated, causing a corresponding reduction in real national income. The Working Group on Agriculture set up by the National Accounts Committee pointed out the underestimation of agricultural output in Pakistan, although a plausible estimate of the extent of underestimation was not possible. In the sub-sectors of minor crops, livestock, fishing and forestry the extent of underestimation is much more pronounced than it is in the major crops sub-sector. This is not to suggest that the current value-added estimation in the later sub-sector fully measures up to the true crop product. Similarly, the small-scale sub-sector in the manufacturing sector adds much more value than has generally been ascribed to it.¹² The present practice is to assume the growth in small-scale sub-sector to be as much as that of population. As a result, an extremely narrow view of the value-added in this sub-sector emerges. This is in sharp contrast to the impressionistic growth picture drawn from the small-scale export expansion and import orders, tax returns, personal visits to places like Daska in Sialkot. In the 1970s, the policy encouragement provided to the small-scale investor, reinforced by fears of nationalisation in the large-and medium-scale activity, seems to have led to enormous expansion in the small-scale activity. To depress it to population growth levels amounts to counting out real value-added of a fairly reasonable magnitude.

Thus, instead of including services to inflate GDP, efforts should be directed to the estimation of value added by the nonservice sector in its fullness. Of particular importance will be to impute the sizeable value added by subsistence economic activity, which is "unmarketed", but certainly not a nonmarket activity lying beyond the production boundary.¹³

¹²This is confirmed by various World Bank reports on Pakistan and by Anwar [1].

¹³It has been estimated in case of India, Kenya and Malaysia—all having under-developed economic structures, that the subsistence activity may range between 14-20% of GDP [5, p. 397].

In the end, it must be pointed out in unequivocal terms that this article is in the nature of a first investigation report. Further study will be required, particularly of the structure of service sector, and perhaps by using more refined techniques, before a final judgement can be passed on the fate of service element in national accounts.

Appendix Table 1

GDP at Constant Factor Cost

(Rs. million)

	Agriculture	Manufacturing and Mining	S-GDP	Services	SNA- GDP
1949-1950	6,595	988	7,583	4,815	12,398
1950-1951	6,768	1,079	7,847	5,034	12,881
1951-1952	6,155	1,164	7,319	5,328	12,647
1952-1953	6,166	1,277	7,443	5,422	12,865
1953-1954	7,005	1,441	8,446	5,634	14,080
1954-1955	6,948	1,614	8,562	5,906	14,468
1955-1956	7,093	1,777	8,870	6,108	14,978
1956-1957	7,254	1,876	9,130	6,294	15,424
1957-1958	7,393	1,948	9,341	6,474	15,815
1958-1959	7,689	2,032	9,721	6,959	16,680
1959-1960	7,711	2,088	9,799	7,027	16,826
1960-1961	7,695	2,359	10,054	7,595	17,649
1961-1962	8,171	2,667	10,838	7,872	18,710
1962-1963	8,597	2,966	11,563	8,493	20,056
1963-1964	8,813	3,309	12,122	9,234	21,356
1964-1965	9,276	3,636	12,912	10,448	23,360
1965-1966	9,318	3,949	13,267	11,859	25,126
1966-1967	9,829	4,165	13,994	11,907	25,901
1967-1968	10,982	4,426	15,408	12,251	27,659
1968-1969	11,478	4,800	16,278	13,176	29,454
1969-1970	12,574	5,343	17,917	14,419	32,336
1970-1971	12,188	5,424	17,612	14,756	32,368
1971-1972	12,611	5,185	17,796	14,878	32,674
1972-1973	12,821	5,675	18,496	16,476	34,972
1973-1974	13,357	6,051	19,408	17,956	37,364
1974-1975	13,074	6,015	19,089	18,999	38,088
1975-1976	13,656	6,026	19,682	19,855	39,537

Appendix Table 2

GDP Per Capita at Constant Factor Cost

	Services	S-GDP Rupees	SNA-GDP	Percent Growth of		
				Services	S-GDP	SNA-GDP
1949-1950	136	215	351	—	—	—
1950-1951	139	217	356	2.2	0.9	1.4
1951-1952	144	197	341	3.6	-9.2	-4.2
1952-1953	143	196	339	-0.7	-0.5	-0.6
1953-1954	145	217	362	1.4	10.7	6.8
1954-1955	148	215	363	2.1	-0.9	0.3
1955-1956	150	217	367	1.4	0.9	1.1
1956-1957	150	218	368	—	0.5	0.3
1957-1958	151	218	369	0.7	—	0.3
1958-1959	159	221	380	5.3	1.4	3.0
1959-1960	156	218	374	-1.9	-1.4	-1.6
1960-1961	164	218	382	5.1	—	2.1
1961-1962	166	228	394	1.2	4.6	3.1
1962-1963	174	236	410	4.8	3.5	4.1
1963-1964	183	241	424	5.2	2.1	3.4
1964-1965	202	249	451	10.4	3.3	6.3
1965-1966	223	249	472	10.4	—	4.7
1966-1967	218	255	473	-2.2	2.4	0.2
1967-1968	217	273	490	-0.5	7.0	3.6
1968-1969	227	281	508	4.6	2.9	3.7
1969-1970	242	300	542	6.6	6.8	6.7
1970-1971	240	286	526	-0.8	-4.7	-3.0
1971-1972	235	281	516	-2.1	-1.8	-1.9
1972-1973	252	284	536	7.2	1.1	3.9
1973-1974	267	289	556	6.0	1.8	3.7
1974-1975	274	276	550	2.6	-4.5	-1.1
1975-1976	279	276	555	1.8	—	0.9

Source: Appendix Table 1.

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