The first question to be discussed in Section 2 is the role of government in the process of growth and development. More precisely the question is: Should we intervene in the market processes or should we let the market determine growth and success and lack of it in LDCs? In this paper we start from the second strand on human capital and growth, that has emerged out to be of considerable importance in the explanation of underdevelopment. The second strand emphasizes the role of human capital and imperfect competition. The first of these two strands focuses on HFD, product and factor differentiation and the geometry in New Growth Theory has been inspired by industrial organization and international trade theory.

1. Introduction

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INTRODUCTION

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Issues in New Growth Theory

The Role of Government, Trade and Employment Growth. Open
2. Government, human capital and growth

Endogenous growth models, which growth theory and known from old endogenous growth theory are relevant for all new growth theory and known from old endogenous growth theory, differ in the corresponding growth rate predictions. The specification problems contained in endogenous growth theory and in employment growth theory influence the estimates of population and employment growth very strongly. Both problems are discussed in section 5. Incentives and decreasing returns to scale follow from these specification assumptions. Moreover, parts of the model, such as national resource problems, including environmental problems, can be seen as endogenous of growth theory. In those parts of the world, such as parts of the world, where neither human capital nor material have sufficient explanatory power, trade and resource problems may be of outstanding importance. Moreover, open economies in section 4.

The shortcomings of the literature lead to the discussion of the consequences of considering the shortcoming of the literature lead to the discussion of the consequences of considering the growth theory. The problem discussed in section 2 is to been addressed in connection with growth theory. The problem discussed in section 2 is to been addressed in connection with growth theory.
are paid for by the government or some industrial organization. To the best of my
knowledge, there are no transaction costs that would exclude people from the free use of public knowledge or their
support. The use of the public knowledge, therefore, can be made free for everyone to
each other. There are transaction costs that make the educational and make
education a private good or a private property. One can either use the transaction costs to organize the education and make
education a public good or use the transaction costs to organize the educational and make
education a private good or a private property. One can either use the transaction costs to organize the education and make
education a private good or a private property.

The example of education is quite suitable to make clear where the tension between


It is not always possible to be explained anywhere in the world once it is produced. (see
organization of US and UK firms and neglect of using Japanese firms' intellectual
and production division (see Freeman, 1988, and Howrey/Rosenberg, 1988)
emphasis on R&D division especially from production division in Japan)

school treatment!

Government and industrial policy! (1)

Emphasis on investment by entrepreneurs with neglect of diffusion and the role of

Emphasis on investment by entrepreneurs with neglect of diffusion and the role of

1990, Howrey/Rosenberg, 1990) show a rather strong

Growth (see, e.g., Becker, 1990, Humphry/Sherte, 1999, Humphry/Weitz, 1999, Kaya,

In contrast to this view recent contributions to the theory of human capital and

Einstein's theory of importance role to the government,

require the public factors such as basic education and basic scientific research, thus

that technical progress depends on human capital and the production of human capital
accumulation of human capital takes place as far as basic education and basic research in
school systems and universities are closely related organizations because there the
influence company.
organization with some co-financing between the government, the patient and the
Heath services or information centers are an internationally wide spread form of
medicines will be people in Africa cannot pay for and therefore the from pharmaceuticals,
example is tuberculosis: although tuberculosis medicine is much less costly than anti-tuberculosis
available very early, but again the use of that knowledge is very costly. A more recent
after the World Bank (1990), the knowledge necessary to achieve this seems to have been
already. The experience is interesting at almost consistent growth rates (with the exception of East
the experiences of the other countries are expected to take place in this world countries. As a consequence, the
similar transition is expected to take place in the birth rate roughly 50 years later. A
demographic transition in Western Europe from about 1850 onwards starting with a declining
of the death rate and followed by a decrease of the birth rate roughly 50 years later. A
deprogrammed transition in Western Europe from about 1850 onwards starting with a declining

The experience of a problem can be found in the accumulation of knowledge. The
knowledge without which agricultural productivity could not be raised.

Knowledge without which agricultural productivity could not be raised in the diffusion of
improvement was deemed as crucial and necessary contribution in the diffusion of
improvement was deemed as crucial and necessary contribution in the diffusion of
government to further the transfer of public agricultural and related knowledge. Government
non-profit organizations with some co-financing by farmers and governments
non-existence of the reasons for the lack of success of those world agricultural. These
which are viewed as crucial for the success of American and Japanese agriculture and their
The experience needed in solving book are agricultural services and extension stations
provided government acts efficiently.

Humphrey Shleifer and Vishny (1991) model that higher tax rates have increase growth rates
use of transaction costs is most important. Thereafter we show in a modification of the
institutional framework where this tension between free access to public knowledge versus
in the following we discuss agricultural services, health services and educational
knowledge is quite unclear which of these ways is efficient in terms of economic theory.
technology. After one period every body can use the technology costlessly. However, if the proportionality to the ability parameter of the most able entrepreneur who improves the change the MSW model. MSW assume that the growth rate in common technology is

we go to the other extreme and assume that government expenditure may also determine

and the increase and assume that government expenditure had an important role in determining the diffusion of public knowledge and other

intermediate effects in the literature mentioned at the beginning of this section

The empirical evidence for the role of government can be.

In knowledge in health, agriculture, education and industry. In the next step we show

government organizations we need mixed forms to optimize the transfer of public

that between the extremes of public market and the intermediate solutions and some

costs of transferring public knowledge seem to play a crucial role. It should have become clear

consequences of reduced death rates non-profit organizations for the sharing of transaction

in education more profitable (see Ram and Schmitter, 1979). Thus, in the case of

successfully reduced death rates is an increase in the expectation which makes investment

public and private activity. Health and education are clearly related. A consequence of

metabolic, health, schooling and industrial policy are four relevant cases of mixed

stimulate innovation (see Dore et al., 1988, Part A for some surveys).

Similar financing schemes and subsidies exist in the industrial organization to

government which is much higher than that in Germany where students don't have to pay

jump sum fee to the university and get a subsidy for their cost of living from the

them and there are state owned universities. In the latter the students have to pay a

elsewhere but generally subsidized. In Germany and the Netherlands schools are publicly

concerned, in the UK and the US schools and universities are more privately organized

5
where on the right side of the inequality we have the income a person would get as a

\[ a \times (1 - 1) + a < (H_{max} - a \times (1 - 1)) = H_{max} - a \times (1 - 1) \]

A higher than wage income

Higher than wage income: A person becomes an entrepreneur if profits are

independent of other factors in their wage rate. (3.2)  

An entrepreneur with given ability h will hire an amount of workers such that the

\[ m = (H_{max} - a \times (1 - 1)) \]  

Maximization with respect to h yields

\[ H_{max} - (H_{max} - a \times (1 - 1)) = \lambda \]  

which is so that profits are given by

In many models an entrepreneur with given ability h hires human capital H

A brief summary of evidence of entrepreneur work see Zimekem, 1994, chap. 9.2

for a better version distinguishing public, firm and household knowledge is Zimekem, 1994, for

usually these factors from public factors via human capital to technical progress (a more

firm are members. Alternatively one could think of the tax as a sort of the

call this the tax levied by the government or an industrial organization of which

or other things entrepreneurs will have to pay part of their revenue for the innovation. We

acquisition of knowledge is costly instead although the knowledge is unprotected by patents
reduces the tax process to the growth rate. In sum, one can conclude that the distortionary effect without any productive role for government expenditure. The result is that a further increase of the tax rate can reduce growth rates. Indeed, if the distortion is tooate that discrimination against savers to enhance the expenditure. If the distortion is too strong, the rate of growth, Bartos and Ziesem (1990, 1992) can be found in Bartos and Ziesem (1990, 1992) and can be found in the literature on human capital and growth productive government expenditure.

\[ \forall P(H) \forall V * J \gamma = J \]

where the rate of growth is determined by the tax rate.

The change in the stock of common knowledge is enhanced by government revenue from the

\[ \forall P(V) - \forall H \forall J * \gamma = \forall P(V) \forall J * \gamma \]

equal the supply of workers.

equal entrepreneurship. In equilibrium with talent distribution (A) the demand for workers must

defined such that people with a > A are workers and those with A < A * are workers. As the tax rate could be canceled out has no influence on the cutoff ability A *
Whether or not more economic growth can be derived to support this view on growth is driven by government expenditure, depends also on the quality of the organization of the government. Public expenditure is only included in a macroeconomic model of economic growth. If government does not produce intermediaries than the private sector can be effective in their respective roles. But the private sector is also a key player in the economy. In both cases, investment in government is another way of government contributing to economic growth.

Income levels.

Percentages point income in the long—run growth rate of per capita GDP in low and middle income countries. Point estimates of the impact of government expenditure on the budget balance of the economy. Own and Williamson (1998) estimate that a one percentage point increase in the tax rate of government would contribute to a 0.1 percentage point increase in the growth rate. The structure of the evidence seems to be more important than the structure of the evidence on the expenditure side of the budget because to be less prominent is also important. Growth rate of government on the tax revenue side of the budget remains to be less prominent. The literature on government expenditure concerning the role of savings alone for growth was also weak: the empirical evidence by Reinhart and Reinhart (1999) found that the evidence for growth reduction through
In the next sections we shall discuss other problems than those taken into account.

Economists approach of working with different models for different groups of countries. After taking fertility into account, seemingly one has to go back to the development effectively significant. However, the results turn out to be unsatisfactory for sub-Saharan the years 1960-80 but a school-enrollment variable which has a positive coefficient and is

A stronger result has been found by Barro (1991) who uses the same approach for education of schoolers.

Condition for growth because it is a prerequisite for schooling of skilled workers and investment and other variables. Similarly, literacy is necessary but not sufficient.

No additional explanatory power in a close—country regression of growth rates on similar result has been deried by Romer (1990). However, the idea that literacy has beginning year of the respective periods. These results are interpreted as threshold values. A

1960-80 were not achieved by countries that had a high GDP to literacy ratio in the 1960-70 and (1990) have shown that a high growth rate of GDP per capita in the periods 1940-70 and

Whereas evidence on expenditure on human capital is scarce, growth theories have

4. On the evidence in the literature on human capital and growth

Tax resistance. Income of ahillites pay more than they benefit from public expenditure. Thus lead to tax resistance phenomenon. Under imperfect taxation system, people who have high

capital, health, agriculture, and industrial policy in Cameroon (1990 and 1992). I argue that

If the argument is correct, why then don't governments spend more on human

Institutions transferring public knowledge (see Card and Krueger, 1992 on this point).
Therefore we turn next to...
Consumption: you consume more now intended of tomorrow which yields a decreasing growth rate of domestic export and consumption. More are now relatively cheaper than tomorrow. Then in the utility maximization: $E_{t+1}$, the terms of trade $p$ increases the mean that strong role for exports explaining growth. The change in the terms of trade also play a role technically progress alone in their theoretical model. However, in their regression they find a technological progress alone in their theoretical model. Therefore, by Obu and Yinnane (1990) where interest on steady state growth being driven by $O_{C}$ and $W^{I}_{A}$ is no longer determined by the rate of technical progress alone. Thus the interest is no longer determined by the rate of technical progress alone. However, the income of LDC countries are second highest growth rate and growth therefore is no longer constant in a steady state. The reason export demand, and the terms of trade are no longer constant in a steady state, the reason of real wages and the terms of trade now depend also on the income and price elasticities of neighborhood of minus one. Growth rates of the capital labor ratio, per capita income, preferences and technology with the evidence. Point et al. (1992), Hensche (1992) and Stern (1992) clearly are consistent with the evidence. However, a small country assumption each country can export as much as it wants to. However, a small country by exports the rate of growth of exports matters. It is just as one makes a small country by exports the rate of growth of exports matters. In terms of different goods different goods have to be paid for goods determine the rate of output growth. As imported capital goods have to be paid for goods and therefore save in terms of different goods than the produce. Imported capital goods therefore save in terms of different goods than the produce. Important capital a third alternative might be to take into account the fact that LDCs import capital growth rate but they are statistically insignificant.

$O/\{y - r[(\bar{A}),u - 1]\} = \omega$
Krugman (1991) has formulated the problem (see also Dessauer 1987, Chap. 4.2).

Some natural resources are a growth limiting factor that has been recognized already by

had no impact on the growth of resource poor countries in the past.

scarcity of environmental resources. It would be a great surprise if these scarce resources
well in the underdeveloped world. Moreover, the world as a whole is running into a
as empirical work. However, there are a lot of resource poor countries in the developed as
world income growth as the driving force of growth. This was based on the theoretical as well
in the previous section we have emphasized R&D, human capital, export parameters and

and specification of production functions

In increasing versus decreasing returns: Natural resource problems, employment growth

5. Increasing versus decreasing returns: Natural resource problems, employment growth

results for Latin America and sub-Saharan Africa.

is that export variables may be the missing elements in Barro’s failure to derive good

by Dessauer (1992). I have supported by the evidence of O’Dell and Williamson (1990)
modelled for trade in goods only by Barro and Lee’s (1970) and for capital movements
function.exports are a driving force (via growth in the world economy). This has been

function. For in alternative.

function of capital market imperfections would seem to be the most natural way to search

together with the taxonomic argument of Pettway and Rubelio (1992) - other utility

rates of per capita consumption. If this cannot stand on empirical test - perhaps one

Different developments in the terms of trade can theoretically explain different growth

\[ \sigma'(d - g - x) = \omega \]
...and Zeeman, 1993).

Endogenous growth theory can be summarized under the three propositions (see Scherer and the implicit growth optimum or pecking. The production function is used in new technology and the problem of new growth predictions because they imply different degrees of increasing returns. They assume that the growth was based on production functions for technical change. Propositions have been developed by Arrow (1969), Phelps (1966) and Phelps (1967). They all emphasize quite externally approach of Arrow's (1962) Learning by doing paper on endogenous growth contained in old endogenous growth theory as developed in the sixties. Besides the purely for technical progress, the predictions in new endogenous growth theory are already strongly dependent on the specifications of increasing returns in the production functions

When doing so growth rate predictions and the quality of model estimation will be

seriously affected. This would correspond to the interpretational structure of growth models. The single country is a good way in combination with statistics from cross country to come to change distributional it country samples are split. Perhaps these distribution towards the level

The other may have recognized that in the empirical literature odd results often

countries can all be characterized as resource poor countries.

In their regression for per capita GDP growth rates although it is not evident that these significant negative coefficients for population growth of low and middle-income countries

but only for a resource poor sample. Open and William (1990) find severely called

employment of working population growth per capita income growth for all countries

and Inborn. In empirical work one should therefore not search for a negative impact of

wage, exploiting and finding resources that is decreasing marginal productivites of capital

return. If natural resources cannot be renewed (after correction for technical progress in

return) the economic run into decreasing returns. If natural resources are scarce, natural resource which let the economy run into decreasing returns at the point of production. The problem is whether or not technical progress is strong enough to outweigh. The growth open economies and the relation to the export expansion of the previous section. The main

for a simplified version, changes 5 and 6 for generalizations and change 7 for applications to
Uzawa (1956) considers an optimal growth model. The outcome is $y_{t+1}$ with a potential.

In the model, the degree of increasing returns and the existence of increasing returns in $K$ and $A$ imply increasing returns. The production function for $y_{t}$ is

$$ y_{t} = f(A_{t}, K_{t}) $$

The production function is

$$ y_{t} = s(K_{t} + \frac{M_{t}}{w_{t}}) $$

Labor supply, $L$, is exogenous and capital is derived by setting out of income:

$$ 0 = K_{t+1} - K_{t} - L $$

$$ 0 = L_{t+1} - L_{t} $$

Labor and capital market equilibrium conditions for a two-sector model are:

$$ y_{t} = f(K_{t}, A_{t}) $$

Indicated by a lower index, the output production function in the one-goodSolow model is now labeled sector 1.

The structure of endogenous growth theory can be summarized as follows. What
Growth theory and Schumpeter and Ziemer are 1993 on old and new endogenous growth used with Phelps or Schumpeter (1993) on old endogenous growth but not in the literature on growth differentiation and monopolistic competition which is most plausible if has mainly been used in the literature on human capital and growth 1960–1980 (see Harisson, 1999). From an empirically point of view the Néera model between productivity did not (+ 1.7%) and there is no decreasing trend in it in the years but productivity per hour worked declined in the DS from 1999 to 1982 (see Sollow, 1968) evidence. Home workers per person decreased in the DS from 1999 to 1982 (see Sollow, 1968) rate (A >) 0 under this specification. Again the seems to be at variance with the interpretational perspective, growing (raising) labour inputs will lead to growing growth the suspicion (since von Wiesbaden, 1969, at least) but looking at it from on the contrary is a value of μ which is growing when employment or population. That is new labor force increases in the years of productivity growth downward (see Harisson, 1999). In Shen's model the outcome value and capacity utilization productivity growth in the DS was still positive during productivity growth may have slowed down but once one corrects for scale economies variance with what we observe under reduced labour hours in the developed countries, increasing remains are weaker than in the Néera model. But empirically this seems of Arrow's model, actually decreasing technical progress is a theoretical possibility here. exceptions but negative rates, labor productivity grows at negative rates if μ is low in negative. Growth (1966) considered only steady states and the outcome is $r = 1$ and this growth rate is in the Arrow model. It is completely independent of the size of sector model with exogenous technical progress. Due to the contract of $r = 1$ is a constant consistent value of $r$. $r$ is a variable that would be consistent in any steady state of the two.
export demand characteristics for capital goods imports and R&D, and systems of innovation factors are highly relevant as well. Source natural resources for resource poor countries. However, for the OED and for Latin America and sub-Saharan Africa other expenditures side of the government budget and less so on the revenue (distortion side).

In this paper we have tried to argue that the external difference in the view on the role of human capital in the development experience on the other side may be reconciled once one takes into account that public knowledge can be transferred only at considerable transaction costs which may be most efficiently dealt with in mixed private-public institutions. Some of the growth consequences of doing that well or badly have been considered. The main question is to look for the government impact on growth on the "efficient" side.

6. Conclusion and Suggestions for Further Research

Schechter and Ziemer (1991) and many thereafter show down growth considerably. The effect of natural resources seems to be subject to strong decreasing returns (see Table 1 above); and the least efficient environment seems to be an unproductive matter. The costs of cleaning up and the costs of growing will then still be positive during the transition from costs to environmental resources. Corrective property taxation will raise the costs of production. The illusion that is much less likely to have vanished is that of the costs of of...
The idea is to identify country similarities by mean scores. Variables mentioned in column three are overall, The main variables that are expected to have an impact on growth rates are \textit{share of GDP (nominal)} and \textit{R&D intensity}. The groups in all likelihood will be used instead of low, middle and high income classification, Column two contains a guess according to growth models. These characteristics are summarized in column one. They can according to growth models. These characteristics are summarized in column one. They can...
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