

The Drive for Public Productivity: The Dutch Experience, 1980-1993

Author(s): Peter B. Boorsma and Piet de Vries

Source: *Public Productivity & Management Review*, Vol. 19, No. 1 (Sep., 1995), pp. 34-45

Published by: Taylor & Francis, Ltd.

Stable URL: <https://www.jstor.org/stable/3380819>

Accessed: 14-01-2021 15:49 UTC

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# THE DRIVE FOR PUBLIC PRODUCTIVITY

## The Dutch Experience, 1980-1993

PETER B. BOORSMA  
PIET DE VRIES

*Twente University, the Netherlands*

### SOME POLICY STIMULI

The international drive for public productivity (efficiency and effectiveness) probably started in the 1960s with discussions on PPBS (planning-programming-budgeting systems), without, however, gaining much momentum during that period. Elements of PPBS were introduced in many European countries, including the Netherlands, in the 1970s. In that decade, however, the dominant economic-political theory was more oriented to increasing the role of the government and the influence of the public domain and to a corresponding increase in public employment.

At the beginning of the 1980s, a watershed could be observed in the public domain and in the role of the government in Holland as well as in other European countries. A drive to improve public productivity and retrenchment of the public sector came to the fore. From an economic point of view, this turning point has been forced by at least three stimuli.

First, almost all Western countries came to face serious budgetary problems in the 1980s, necessitating a cut in public expenditure. A second stimulus to the public productivity drive of the last decade has been given by normative discussions, starting, for example, with value-for-money concepts. Third, the reorientation of the public sector is accompanied by a reassessment of the neoclassical perspective on the role of government.

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*Authors' Note.* This article is an edited version of a paper presented at the International Productivity Symposium VI: Challenges for the 21st Century: Productivity, Technology, Equity, and Sustainable Development on June 5-8, 1994, in Vancouver, British Columbia. The authors express their gratitude to two anonymous referees of this journal for their critical remarks and to their student assistants—Bertien Steenberg, Jan-Andries Wolthuis, and Martin Schellekens—for their active search for documents related to the topic. Incorporating all the reports they have given would double the size of the article. A complete version of the paper may be obtained by contacting the authors at Twente University, Faculty of Public Administration, P.O. Box 217, 7500 AE Enschede, the Netherlands.

*Public Productivity & Management Review*, Vol. 19 No. 1, September 1995 34-45  
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In the Netherlands, as in some other countries, these three stimuli have evoked a continuous and relatively strong drive toward public productivity improvement, using a wide array of policies and very different measures.

#### OUTLINE

The first section of the article deals with some general topics, such as the definition of productivity (a swampy area) and problems of its measurement. The next section deals with general measures applied by many departments of the central government and many other public authorities, including cities and provinces. These measures, such as privatization, contracting out, decentralization, user fees, changes in administrative rules and accounting techniques, and increasing the size of a public organization or constituency, have become international buzzwords. It would go beyond the context of this article to pay attention to all these phenomena.

On the other hand, productivity measures with a more specific feature may be discerned. Such specific measures, such as the reorganization of police and the health sector or the divestment of school buildings to the school boards, will not be dealt with in this article.

In the final section, some conclusions will be inferred based on an overview of Dutch public productivity measures adopted during the last 13 years.

#### THE DEFINITION OF PRODUCTIVITY

The problem of definition is even more acute for the public sector than for the private sector (Moss, 1973). Whereas the production of the private sector is valued by the market process, the majority of productive activities in the public sector lack this yardstick. The public production consists predominantly of nonmarketable goods or merit goods, which are funded by budgets rather than prices. This is the well-known cause of the pervasive productivity problem in the public sector. To handle the economic aspect of the problematic relationship between inputs and effects on policy goals, three productivity concepts are helpful. First, the allocative efficiency, which is the overall concept used to indicate the relationship between the results of the production process and the relevant inputs. Policy implementation can be perceived as a production process. Therefore, in respect to the public sector, allocative efficiency reflects the appropriateness of the input allocation in respect to the policy goals.

However, measuring problems hamper a straightforward application of allocative efficiency to the public sector. The (public) production process, therefore, must be divided into two parts by the introduction of the output concept as an intermediate good or product in the production process, that is, between inputs and effects. In this manner, the concepts of efficiency and effectiveness, which are typical of public productivity analysis, can be introduced. Efficiency is the ratio between output and input; effectiveness concerns the relationship between effect and output. Schematically, these interlinked concepts may be shown as seen in Figure 1.

The efficiency ratio can be relatively easily measured, which means that efficiency comparisons can be made between different production periods, different sectors, or production plants. The aforementioned problems involved in the relationship between the effects on policy goals and inputs return in the effectiveness concept.

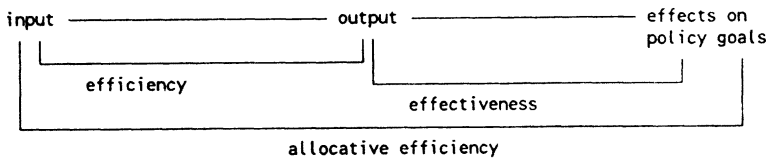


Figure 1.

Given this definition, the second basic question arises: How may the output/input ratio be influenced, keeping effectiveness constant? To deal with this subject, it is possible to refer to the well-known productivity determinants found in the (textbook) economic literature. These factors, which were originally distinguished in the private sector, will be briefly considered.

These productivity variables can be divided into two types: (a) variables that have been developed for a neoclassical framework of markets and competition (e.g., economies of scale and scope, and economic efficiency), and (b) neoinstitutional variables (i.e., comprised within the X-efficiency concept). This concept dates from Leibenstein (1966) and indicates that factors other than production functions and prices are highly relevant productivity variables, such as behavioral freedom, procedures, and the assignment of property rights.

Consequently, two kinds of measures can be distinguished in the description of the Dutch drive to public productivity: (a) productivity measures that may be called neoclassical (e.g., the introduction of user fees, the promotion of technological development, and reaping the economies of scale or scope), and (b) the reduction of X-inefficiencies, which covers a range of measures such as privatization, internal decentralization, changing funding systems, changing accounting rules and techniques, and the use of productivity measures. Such measures have a neoinstitutional background. For that matter, the so-called neoclassical measures and the reduction of X-inefficiencies are interlinked because a reshaped management style might induce economic efficiency or technological innovation.

Finally, measures covered by the various variables interact with retrenchment. For example, the reduction of public expenditure by a cut in civil servants' salary increases efficiency as defined. It is hypothesized that continuing budget cuts across the board will increase productivity in a first phase, but will decrease productivity in later stages, as the most highly motivated or mobile employees will leave the organization, machine performance will decrease because of savings on maintenance, and so on.

### General Measures

The privatization movement in the Netherlands started with two reports. A government reconsideration report was published in 1981, dealing with privatization and user fees, stressing the latter ("Heroverweging," 1981). At the same time, Boorsma (1981) published a report dealing with all types of privatization measures. Privatization, as in many other countries, but unlike the United Kingdom, is used in the Netherlands in a wide sense, encompassing user fees, contracting out, selling off public property, and

granting more independence to public organizations. Since 1981, different Dutch governments have ordered a privatization policy along these different lines.

#### USER FEES

User fees had been advocated by economists and policy scientists in the 1970s, but to no avail. The new Dutch government, lead by Lubbers, which took office in 1983, made the use of user fees one of the guiding principles of its policy, together with privatization. In 2 years, more user fees have been raised than in the 20 years prior to 1983 (Boorsma, 1986). The main stimulus has been a change in the budgetary policy, which facilitated the departments to use extra funding from user fees in their budgets. The demonstrated mushrooming of user fees has also been witnessed in those U.S. states that applied Proposition 13-style tax ceilings. Examples of intensified user fees at the national level are increased passport fees, court levies, land registry fees, higher fees in public libraries, and so on (see Haselbekke, 1987).

New applications still under discussion are electronic systems for highway user fees and a selective surtax (admittedly not a price) for rush-hour use of highways in the urbanized, western part of Holland.

At the municipal level, such pricing for public service has been applied on an increasing scale, mainly for budgetary reasons. Municipal policies have been formulated to increase the service fee to cover the total cost of operations. Most obviously, this has been the case for municipal garbage collection and for sewerage fees. Rates have been increased, too, for building fees, burial and cemetery fees, and fees for services like municipal music school lessons (see, e.g., Vereniging Nederlandse Gemeenten [VNG], 1986).

The last question to be answered, of course, is whether user fees only generate extra budgetary income or whether they also give a boost to public productivity. The answer will depend inter alia on the price elasticity. If demand is price elastic, the increase in a fee will improve citizens' (and politicians') allocation of scarce resources: Overconsumption will be reduced. Thus user fees may improve effectiveness, although possibly neither efficiency nor productivity in a strict sense.

#### INTERNAL DECENTRALIZATION

Internal decentralization (Kickert, Mol, & Sorber, 1993) is defined as giving more autonomy to public organizations in respect of productive activities. Internal decentralization is less far reaching than incorporation ("hiving off") or selling off; it might be a preceding stage.

An alleged advantage of internal decentralization is that it increases the span of control. However, this management argument presupposes that outputs can be perceived. Is the economic performance of a decentralized unit easily measurable, or can appropriate output indicators be developed? In brief, is it possible to measure the "D output"? (Bradford, Malt, & Oates, 1969). The possibilities for specifying the product of the unit involved govern the success of internal decentralization. Internal autonomy entails "management by contracts" and budgeting for results. This induces a shift from control by regulation to management by incentives. Consequently, the autonomous unit will be more results oriented, will be able to make more adequate use of its specific

information, and will no longer be hindered by prescriptions concerning the use of productive factors. This approach has been implemented in a rather pure form by the Department for Education in their new approach toward the universities, developed in a report titled *Higher Education: Autonomy and Quality* (Ministerie van Onderwijs en Wetenschappen, 1985).

Since 1983, the management by contract (contract management) concept has been applied widely in many if not most municipalities and provinces, reinforcing a reorganization process toward the concern-sector-organization model. The concept has reinforced changes in budgeting and subsidy relations as well, changing the relation between the public organization giving a grant and the subsidized organization (like sport clubs, associations for youth work, cultural institutes, and so on). It is assumed that such changes will drive the more autonomous organizations toward greater productivity.

On the central government (state) level, the concept of contract management, starting in 1983, has shown several forms. Contract management as internal decentralization has been substantiated by decentralizing some central functions, such as those for personnel and finance, to the spending agencies within a department. The consequence is that the central finance office of a department has to find other ways to govern the financial means, to control the budget implementation, to monitor the threat of budgetary overruns, and to monitor the efficiency of the spending decisions.

Internal decentralization, in the form of more independent organizations (“at arm’s length”), has been applied by almost all departments (see de Groot, Haring, Kuhry, & van Noort, 1993). Examples are the land and real estate registry, the state prisons, and so on. The latest application of internal decentralization at state level is the creation of more autonomous agencies: four agencies founded per January 1, 1994. The four starters, including a computer center of the defense department and an agency for assessing immigration requests, have a considerable autonomy in such decisions as the creation of reserves and will have a commercial cost accounting system (compared with the cash-obligations base of the central government accounting system). In the near future, other departmental organizations will also receive the “agentschap” status.

De Groot et al. (1993) give some empirical data on productivity development in the more independent organizations like the real estate registry: Over the entire period 1985-1992, there has been a strong increase in production, which, together with the declining labor force, has improved labor productivity; due to a strong increase in material costs, unit costs have risen over the last years.

#### **INCORPORATION: EXTERNAL AUTONOMY**

In many countries, privatization takes the form of changing a public organization into a more independent, private (incorporation) or public organization with greater statutory autonomy, although with public ownership. This process of incorporation, or hiving off, is chosen for two reasons. The first reason might be to restructure the formerly public organization into a more businesslike firm, applying nongovernment accounting techniques and more businesslike procedures for hiring, firing, and pricing decisions. This approach is used as an “incubator” to reshape the firm to make it fit to compete with marketplace firms. After the restructuring process, further privatization

is possible by selling the modernized firm. Examples in the Netherlands are the incorporation into a joint stock company (NV) of the former government company PTT (Post, Telephone, and Telegraph), one tranche of the shares of which were sold in June 1994; and the incorporation into an NV of the Governmental Procurement Office and of the Governmental Computer Center.

The second reason for this step in the privatization process is to improve the productivity of the target organization. The argument runs that the organization will operate more efficiently if it is at arm's length from the government, having more autonomy in hiring and firing decisions, using nongovernment accounting techniques, being less subject to political interventions for political objectives, such as stimulating employment, and so on. Examples of hiving off in the Netherlands are the incorporation into a private foundation of the government lottery, the Motor Traffic Guarantee Fund and the Governmental Psychiatric Institute, and of all government museums, and also the incorporation into an NV of the former government water company in the new polder, now owned by a province and some municipalities, or of the NOS (broadcasting) facilities. In addition, the incorporation into a closed stock company (BV) of the former Governmental Sea Pilots Agency, which BV is incorporated under public law. Other examples are the incorporation into "special public authorities" under public law, like the regional labor organizations and the air traffic service.

The corporate body chosen for the new, more independent organization will differ depending on the ultimate goal of the step. If a future sale is considered, it is normal to choose the joint stock company (NV) structure; if the new organization is to remain under the influence of the public domain or is to remain a nonprofit company, the private legal form of a foundation, association, BV, or the public legal form of a public authority will be chosen. This last type creates legal space for an organization to develop its own income sources and own budgets, and it may take different shapes. The topic of the legal body is mentioned in this context because the choice of the legal status will influence the productivity, at least according to the policy underlying these measures and according to the neoinstitutional literature.

There is some empirical research available on the productivity of the incorporated regional labor offices. De Groot et al. (1993), in their study of the restructuring years 1990-1991, found a strong increase in agency costs, whereas the product indicators for the same period remained stable. It is probable that the reorganization, as such, has caused a (temporary) cost increase.

## CONTRACTING OUT

Each organization always faces "make or buy" decisions, and certain activities have usually been contracted out, like road construction (but not repair), office and domestic dwelling construction, harbor dredging, and so on. Contracting out is a type of privatization, restricted to the implementation of certain tasks according to specific contractual conditions at a contractually arranged price.

The formal arguments used by many public authorities for contracting out (and other types of privatization) are for budgetary savings, an improvement of macroproductivity, increasing economic growth, increasing the managerial span of control, and reducing the workload on politicians. These last arguments mean that privatizing will

relieve certain activities/organizations, politicians, and bureaucratic managers from nonkey issues, leaving them more room to take decisions on politically more important issues. Thus the productivity of the whole political decision-making process might improve as well.

Setting aside the formal political reasons, economic research in many countries and in many different policy sectors has quite frequently revealed that for-profit firms are more efficient than not-for-profit companies, whereas most research (Boorsma, 1981; Borchering, Pommerehne, & Schneider, 1982) shows that market companies are more efficient than public firms. This outcome has been criticized by others (Millward & Parker, 1983), but it has been shown (Boorsma, 1989) that, if contracting out studies are separated from other privatization studies, the conclusion that contracting out is more efficient than public production is very robust.

As stated before, contracting out directly affects public employment, for which reason privatization in general, but especially contracting out, has been severely attacked by public sector labor unions. For politicians, too, it is easier to decide upon privatization, in general, and implement it via hiving off than to opt for contracting out. In some cases, the employment problem has been avoided by several constructs, such as the leasing of public personnel to private contractors.

Although contracting out has encountered considerable resistance, many examples can be found, such as garbage collection, park maintenance, sports facilities management, road repair (quite often previously done by public employees and now by private contractors), cleaning and catering (all government departments), security services for public buildings (all government departments), printing, car maintenance, and so on.

Again, the last question to be answered is why any attention is paid to the subject in this article, because contracting out is chosen primarily for budgetary reasons. What is the impact on productivity? The answer is twofold. First, if activities are contracted out to a more efficient contractor, productivity on a macro level is increased. Second, many municipal and provincial organizations, confronted with the threat of reduced employment as a consequence of contracting out, have raised their own productivity.

#### **SELLING OFF**

In the United Kingdom and other countries, privatization means selling off publicly owned enterprises, such as British Gas. From this perspective, privatization might in a broader sense encompass the sale of (other) public property, such as public housing and public lands. Because privatization of property might even take the form of a free handout of the public housing stock to the tenants or of stock to employees, privatization in this context might be conceived as the transfer of property rights from public into private hands.

The reasons for this process will be different for different countries and different assets. Quite commonly, the stated goals are an increase in productivity, because many publicly owned and managed companies are run at a loss, along with other goals like the generation of (capital) income needed for budgetary reasons or strengthening the private sector to increase economic growth. These goals are used in the Dutch political scene. Because the Netherlands did not experience any strong nationalization tradition in the 1960s, unlike the United Kingdom or France, there are not so many companies



to be handed over. Some examples are of minor importance, like the sale of some departmental computer centers, the management buy-out of some departmental consulting bureaus, and on a small scale, the sale of publicly owned houses to their tenants. There are some major examples: DSM (Dutch State Mines), the savings banks, and telecommunication. The DSM case relates to the 100% ownership of DSM NV, a stock company that operates chemical industrial activities in several countries. The company is operating on the international competitive market and is making a profit. The government has sold two tranches of one third of the shares (amounting to \$D.FL.2.8 billion), not so much to increase productivity, but to generate an extra, although incidental, income for budgetary reasons, the legitimation being the fact that the chemical industry is not a core business for a government. The savings bank case relates to the former government company PTT, which operated postal deliveries, the telephone service, and public savings banks. The savings banks have been hived off and have been combined with a bank owned partly by government. In a successive stage, the government sold the bank shares. Thus the privatized bank has merged with a private insurance company to create a financial group, one of the largest in the world. This case might show not only budgetary income for the government, but productivity gains for the savings banks as well.

The third case relates to the telecommunication and postal delivery part of the former government company, which has been incorporated into a joint stock company, Koninklijke PTT Nederland (KPN) NV. The new private company has taken a few years to modernize and adapt to a competitive atmosphere, and part of the stock of KPN NV was sold in mid-1994. In regard to the effects of this privatization case, the productivity of the telecommunication services seems to have risen.

Obviously, the incorporation of former public agencies might improve productivity. The selling of a part of the shares on the stock market will increase the market control of the firm, not only via the stock market itself, but via the management market as well, thus also stimulating productivity. As has been mentioned above, the privatization of certain organizations implies that politicians and bureaucratic managers are left with more time to spend on political key issues, which might also stimulate productivity in the organizations left in the public sector. Even the sale of houses to their tenants might improve productivity in some abstract sense—not the productivity of the public employees, but of the invested funds, because the tenants as owners will spend more energy on maintenance.

#### **ECONOMIES OF SCALE: INCREASING SIZE**

The economic literature has given us the notion that increasing the scale of operations might reduce unit costs, although diseconomies of scale will be generated as well.

This “law” has been used by public organizations in many instances (see, e.g., van der Krogt, Boorsma, van Deth, & Ruiter, 1987), although the empirical evidence is not always so clear and although arguments against it are plausible. Merging public organizations to increase their average size has been a continuous process at the municipal level: The number of cities has decreased from 809 in 1980 to less than 650 today. Successive ministers of the interior have followed a formal policy of municipal

regrouping, aiming at a minimum size of at least 10,000 inhabitants. Parliamentary opposition has led to this criterion being reduced to 7,500 citizens. The arguments for the minimum size are cost reduction and improved service levels, as larger cities are able to hire more different types of bureaucratic capacities, which are needed in a complex, modern society. Whether the arguments warrant the large reduction in the number of cities is a point that could be debated. Academic research has shown that the quality of political decision making was, on average, no lower in smaller cities than in larger cities (Thomassen & Ruiter, 1981), whereas from the empirical point of view, the issue of economies of scale remains shady as well. Larger cities tend to have higher unit costs, although it is not clear if that is due to other intervening variables, such as the physical, demographic, and social characteristics of larger cities compared to smaller, rural municipalities.

Mergers are also to be found in the case of water authorities, the oldest democratic bodies in the Netherlands; the number of water authorities decreased from 332 in 1980 to 124 in 1993. The reduction has been driven by the necessity of increasing scale, reducing costs, and the confrontation of technological requirements. This last development has been responsible for the many mergers in the energy sector (see, e.g., Künneke, 1987; Peer, 1987; Schorer, 1987); the roughly 16 electricity production plants dating from 1980 are fusing into four or five energy companies, dividing the country into four geographical areas. These four companies, which also changed their legal status into joint stock companies (owned by public bodies), have also shown "vertical concentration" by merging with former municipal electricity distribution companies, and "horizontal concentration" by merging not only with other electricity production plants but with other energy plants as well, most notably former municipal gas distribution plants (Commissie Concentratie Nutsbedrijven, 1981). Other merger processes have been implemented in all types of schools in hospitals, homes for the elderly, social health insurance funds, and so on.

#### CHANGING FUNDING SYSTEMS

In recent years, many organizations funded by the government, either by a budget allocation or a subsidy, have faced changes in the funding conditions in regard to their activities and/or their spending autonomy. Although many of these changes have been influenced by budgetary needs, an important stimulus has been the idea that a change in funding conditions might stimulate the funded organization toward more efficiency.

Although it was quite common in the public sector to give an input-oriented budget, in the last 10 years many budgets have been changed into activity-based or output-based budgets, in line with the older literature on performance and program budgeting. This change in budgeting has gone hand in hand with internal decentralization, contract management (see the Internal Decentralization section), and external autonomy (see the Incorporation: External Autonomy section).

One other application is the introduction of lump-sum budgets. Although based on some level of output or activities, the budgetary amount may be spent by the organization in an autonomous way, on salaries, material, or other costs. The idea is that the organization is in a better position to weigh its different needs than the central

funding agency, thus achieving the optimum spending decisions. Another application might be the ending of specific capital investment grants, replacing these by an increase in the annual general budget.

Examples of integrated lump-sum budgets are to be found in the police, teaching hospitals, and vocational schools. Since the creation of regional police forces in 1993, the separate budgets for personnel and for material costs have been integrated. Lump-sum grants have been given to universities since 1978 and to vocational colleges since 1986 (Groot, 1988).

Teaching hospitals received investment grants for capital needs up to 1990; since then they have been allowed to enter the capital market for loans, although the debt is serviced from their annual (increased) budget. Since 1993 this change in capital budgeting has also been applied to vocational colleges.

Another wide-ranging change in funding systems relates to the financial relation between the central government and the cities. At the beginning of the 1980s, the idea was born that national productivity of public funds might be increased by reducing the number of specific grants to the cities by reducing the relative financial size of these grants, at the same time increasing the general grant from the municipalities fund. The number of specific grants has been reduced from more than 500 in 1982 to 205 in 1994.

#### CHANGING ACCOUNTING SYSTEMS

In the 1950s and 1960s, most Western countries paid more attention to restructuring the budget decision-making process via PPBS or ZBB than to improving it by changing the underlying accounting rules and procedures. The latter change started in the 1980s in the Netherlands.

After some preliminary changes in the period 1978-1985, and after some budgetary scandals at the beginning of the 1980s, the House of Representatives finance committee asked for a major change to the whole accounting system. This major change has taken 6 years to implement and some further changes are planned. These changes imply an acceleration in the submission of supplementary budgets (to be submitted during the fiscal year instead of much later *ex post facto*) and of the final budgetary accounts (before 1985 it could take 10 years for the final closing of the accounts), the submission of (approving) auditors reports (not given before 1985), the integration of the cash administration with the (prescribed but up to 1985 very deficient) obligations administration, a restructuring of the budget format and the addition to the budget memorandum of information on output indicators and unit costs, and the computerization of the departmental administration. This process of restructuring has taken 6 years and a great deal of money. A direct result is that almost all departments submit positive auditors' reports and that for some years budgetary discipline has improved, as demonstrated by a large reduction of budgetary overruns. Although the impact of this accounting revolution on departmental productivity has not been studied, positive effects are to be expected. The attention given in the budget memoranda to output indicators might improve productivity as well; productivity improvement starts with the identification and measurement of outputs.

The accounting rules of the municipalities were also changed in the 1980s; as a matter of fact, they are once again being subjected to a complete overhaul, starting in 1994.

## Conclusions

The article has shown that the Netherlands has displayed a strong drive toward public productivity improvement in the last 14 years. The strongest boost has been given to this process by severe budgetary constraints, but the process has been reinforced by political developments, stimulating public authorities to concentrate on their core business.

Many public authorities have taken many different measures, such as privatization, incorporation, user fees, increasing size, reorganization, changing accounting rules, and so on.

Many of these measures accord with common sense and economic theory, whereas other measures are more debatable.

So many are the differing measures taken by the same public organizations, that a danger exists of leapfrogging, of measures counteracting each other in their impact on productivity.

What is the empirical contribution of each measure to productivity? Although productivity measurements have been performed for certain sectors (see Sociaal en Cultureel Planbureau, 1989), a rigid testing of most measures has not yet been performed. It is scarcely even known whether public productivity is rising over a longer period. It is expected that in the long run public productivity rises; for general reasons like a rise in education and a rise in technology, and for special reasons like the measures dealt with in this article.

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*Peter B. Boorsma is a professor of public finance. He specializes in public financial management, privatization, and public sector efficiency. He is a member of the Dutch Senate.*

*Piet de Vries is an associate professor of public finance with a special interest in public productivity, the economics of infrastructure, and neoinstitutional theory.*