Usually book reviews are published as short notes. This practice enables the reader to acquaint himself at leisure with new, often bulky work. Originally, my review of Frans van Winden’s Ph.D. dissertation, On the Interaction between State and Private Sector: A Study in Political Economics, State University Leyden, 1981, viii + 319 pages, was no exception. The short note format, however, has a drawback, namely that it leaves no room for the author to defend himself against criticism which he finds unfair or otherwise below standards. Fortunately, the Editor of this journal kindly provided additional space to expand the review to an article, a format which facilitates comments by the author of the book.

Having whet the appetite of the reader, let me begin with saying what On the Interaction between State and Private Sector is all about. This book of over 300 pages consolidates Van Winden’s research since its beginnings ten years ago. His area of interest is the interaction between state and private sector. Van Winden has a good sense for importance and relevance in furthering economics as a science. The role of the state as an integrated part of the economy as a whole is indeed an important yet neglected subject in the literature. Perhaps the state of affairs is somewhat comparable to that of capital theory half a century ago. At the time capital stock statistics of sectors of the economy were single ‘values’ and could be used only to check the feasibility of a bundle of final goods given an exogenous ‘amount’ of capital. Only disaggregation of capital stock statistics by sector of origin cleared the way for true dynamic modelling with endogenous accumulation. Similarly, government statistics are still aggregated and used outside the core of economic models as exogenous variables. To clear the way...
for economic modelling of the state in relation to the private sector, more
detailed statistics of government activities are required, and, for this purpose,
new theory must guide us.

Van Winden aims at filling the gap. His book attempts to present a nonnorm-
mative, theoretical analysis of the interaction between state and private sector in
a capitalist economy. Given the state of affairs and the proclaimed objective, the
book will be reviewed from the standpoint of orthodox economic theory. Since
the author undertakes his analysis at the macro level, using classes rather than
individual agents, game theory supports his arguments from time to time and, as
a chapter of economic theory, will also be used in this review. Technicalities will
be kept at a minimum as the subject is also of clear interest to the nontheorist.

For easy cross reference, numbers of sections in this review correspond with
chapters of On the Interaction between State and Private Sector.

Van Winden has the merit that he defines all his concepts, however philosophi-
ical they may be. Perhaps he goes a little too far by introducing names for
concepts which he suggests to be novel. He even lets his work define a new field,
namely ‘Political Economics,’ as opposed to political economy and other
established branches. I shall attempt to relate Van Winden’s notions to the
orthodox concepts of economic theory, to delineate his contribution.

The central concept of this book is interaction. To define it, the author
considers two agents, $i$ and $j$, which can choose from activity sets $A_i$ and $A_j$,
respectively (17, 19). Since $A_i$ and $A_j$ are choice sets, they contain at least two
elements, say $a_i$ and $a'_i$, and $a_j$ and $a'_j$, respectively. Now, “agent $i$ is said to
interact with agent $j$, if and only if there exists a function $r_i: A_j \rightarrow A_i$ such that
$r_i(a_j) \neq r_i(a'_j)$ for some $a_j, a'_j \in A_j$” (19). In other words, the author defines the concept of
interaction by the existence of a function from one agent’s choice set to another
one’s such that different values are assumed; the function is to describe an exter-
nality. This point of departure is quite nonsensical, for such a function always
exists. Simply take $r_i: A_j \rightarrow A_i$ defined by $r_i(a_j) = a_i, r_i(a'_j) = a_i$ and all other
values arbitrary. Then $r_i$ fulfills the condition of different values, so that, by
Van Winden’s definition, the agents interact. Since the agents were taken arbi-
trarily, it follows that Van Winden’s definition implies that everybody interacts
with everybody and, therefore, it is weird. I assume the author really means that
the entire choice sets of an agent is a function of the actions of other ones, or, for-
formally, that interaction is defined by the existence of a function $r_i: A_j \rightarrow A$
where $A$ is the family of all choice sets, such that $A_i = r_i(a_j) \neq r_i(d'_j) = A'_i$ for
some $a_j, d'_j \in A_j$. But then the concept of interaction is precisely that of a generalised
game in Debreu’s social equilibrium analysis where strategy sets of players
depend on the actions of others. Since the strategy set is dependent on others, so
will be the element which a maximising agent will pick as his actual strategy.
Having defined some more concepts, which we shall mention when we need them, Van Winden develops a sequence of models of increasing complexity.

The first model serves as a prototype. We shall discuss it in some detail, refining the game-theoretical framework in the process.

The economy consists of two sectors: the private sector and the state. The private sector transforms labour and capital into the so-called private product. The state transforms labour into services. The private product is consumed by all agents in the economy, but is not used to augment the stock of capital, which is fixed. The state services only enter the utility of those favouring the state which, therefore, is a self-satisfying institution and not, as the author suggests, the supplier of a pure public good. (A pure public good is defined to be enjoyed by all in common.) The 'welfare' of the private sector is simply equated with the private consumption part of the private product. Basically the economy is made up of Keynesian parts. Now how does the system work? Here the author casts the model in a game-theoretical framework.

The players of the game are the private and the state sectors. Their strategies are their input demand variables plus, in the case of the state, the tax rates. These are chosen such as to maximise utilities. The private sector wants to maximise profits after taxes. The state is modelled as a composite player maximising a weighted average of the private and public consumption parts of the private product. Thus, the state reflects the power of those who want to promote private consumption versus those who advocate public consumption. The corresponding interests are weighted according to the political power balance and this yields the state's objective function.

The rules of the game are assumed to favour the state. Firms are small and numerous; they do not cooperate and take prices and tax rates as given. Consequently the private sector is a degenerate player which, given the strategy of the state, merely performs the usual maximum profit calculation. The state, however, consists of agents which, however varied the interests they represent, have agreed to cooperate on the basis of a weighting of the underlying interests and to act forcefully. The state even takes into account the repercussions of its strategies on the private sector. Since it knows the behaviour of the price and tax rate taking private sector, the equilibrium of the game is determined by solving the state problem of maximising its objective function, based on the agreed-upon weights for private versus public consumption. Such an equilibrium is defined as a Stackelberg equilibrium. (The author's definition of an equilibrium (28) is misleading as it concerns a Nash equilibrium which is relevant in games with symmetric rules, unlike the present one. A footnote (264) repairs some of the damage by explicit reference to the Stackelberg equilibrium, but does not affect the definition of equilibrium.)
The pursuits of individual and public happinesses compete in two rounds. First they are weighted to determine the objective function of the state. Then the state plays a Stackelberg game with the private sector. Since the state is almighty in the second round, the real game is played, ironically, in the first phase where weights are determined. Now, as has been observed before, the modelling of the state is essentially cooperative. Whatever the political weights for private versus public consumption, the state maximises the implied average. The economy is pushed towards the so-called *Pareto efficiency frontier* where, by definition, neither the private nor the public consumption part of private output can be increased without diminishing the other. Inefficiencies which typically are present in economies with few players representing class interests are simply ruled out by the assumptions of cooperative behaviour within the state and domination of the private sector by the state. Keynesian multiplier effects are pre-empted, the economy is already maximising consumption as a weighted average of its private and public parts.

The *second* model comprises a more detailed picture of the structure of the economy and is used as a basis for subsequent analysis. The model is dynamic with time running through a discrete and finite index set. Although stochastics are absent, expectations are formed. Expectations are not rational but static. The state expects the price level and private product demand to be equal to the last available price and transaction figures, firms expect labour productivity to remain, and so on. As before, the private sector transforms labour and capital into the private product, while the state transforms labour into a nonmarketed product. The private product is also used for investment and accumulated state output now feeds private productivity.

The whole model is given by 36 equations which describe, for example, the assumptions that state labour demand does not exceed the available force and, *vice versa*, labour supply is a function of demand which even may exceed the total labour force, the assumption of an exogenous minimum state size, the presence of a statutory minimum consumption basket, a maximum tax rate "which may be violated" (61), a balanced budget, a Phillips curve, a zero households' propensity to save and investment linkage to the so-called excess funds which are basically current profits, and inflationary pricing as a function of excess demand.

The players are the private sector, the state, and also the households. Their instruments are their input demand variables plus, for the state, a uniform income tax rate. The households 'act' mechanically. Their labour supply is essentially inelastic (ignoring the erratic dependence on labour demand by which supply may even exceed the available force). Since the Phillips curve and some subsidiary institutions such as the minimum consumption basket deter-
mine the wage rate, income is given. All income is then spent on current consumption, since the propensity to save is, by assumption, zero.

So far the households. Firms are still small and numerous; they do not cooperate and take tax rates as given. They do know, however, aggregate excess demand and adjust the product price as a function thereof. The quantity decision is straightforward. Labour demand is determined by the available capital stock through the production function which has conveniently turned Leontief-like; with fixed input proportions, and the capital stock equal to accumulated investment. Thus, it remains to determine the level of investment. Investment is financed by retained earnings. New capital can be used two periods later and then yields returns given by, essentially, the wage and price levels which are extrapolated in the described static expectations fashion. The new capital will also be productive in the further future, three periods later and onward. This fact, however, is ignored by assuming an overwhelming time preference discount rate. There is just a simple trade-off between a dollar foregone now and its return two periods later, as determined by the prices and the discount factor. The Leontief specification of technology, so convenient for the determination of labour demand, now proves troublesome. Basically, there are two possibilities. Either the rate of return exceeds one, in which case it is profitable to invest all you can. Or the rate of return falls short of one, in which case it is best not to invest at all. In the hairline case investment is indeterminate. As is typical for constant-returns-to-scale models, price taking profit maximisation yields bang-bang behaviour. To avoid this complication the author invokes a brute force argument and respecifies the utility function of the firms. Although he suggests that utility equals a discounted expected flow of dividends (which are profits minus investment reservations), he really specifies a Cobb-Douglas function of the dividends now and two periods later with time preference exponents (65). This nonlinear construct renders extreme behaviour (investing all or nothing) unattractive and rounds off the modelling of the firms' behaviour. Putting the specification aside, firms once more do the usual maximum profit calculation and thus constitute a degenerate player.

The state player is more fully developed. It maximises a weighted average of private and state output, but now also of deviations from an ideal growth path, all taken instantaneously. Thus, the state reflects the power of private versus public good advocates as well as of bureaucrats. These interests are weighted according to the political power balance. However varied their interests, state participants stick with the weights and agree to cooperate in the 'game' versus the households and the firms who act predictably, as just described.

An equilibrium is redefined by the condition of "the constancy of all variables over time." This is a departure from economic theory where equilibrium is defined either as a cancelling out of forces such as supply and demand, or more general, as a set of strategies which are attainable and best in terms of own utility functions. It does not follow that equilibrium values are constant; particularly
in the present model, where accumulated state output feeds private productivity, it would be exceptional to find 'constancy of all variables' since in fact state output would have to be and remain just equal to the depreciation of state capital (60). In short, stationarity is mistaken for equilibrium.

The first proposition claims that 'equilibrium' as just defined need neither exist nor be unique. The second proposition claims that all expectations are realised. This is trivial since 'expectations' are static and 'equilibrium' is defined by stationarity. The third proposition claims that the capital stock is fully utilised, but labour may be underemployed. This asymmetry is remarkable, especially in view of the state's capability to absorb all unproductive labour but no capital, to coin a Marxist phrase for a change. Further propositions present 'equilibrium' values in relation to the 'type of state,' that is, the political weights in the state's objective function.

So far the focus has been on macroeconomic relationships with relatively little attention given to the behaviour of economic agents. In the central, third model, actions of the participants are related to their economic positions through so-called interest functions. The author calls this approach the 'Interest Function Approach' and distinguishes his study by the name of 'Political Economics,' posting it next to mainstream economics, Marxism, and 'Public Choice.'

In the present state of affairs, 'Political Economics' is based on the Van Winden 'Interest Function Approach.' Here the primitive is a so-called elementary interest function, of which there are four types, one for each kind of mutually exclusive economic agents: state sector workers, private sector workers, capitalists, and unemployed (96, 100). Each elementary interest is a function of three variables, namely, average real disposable income, average state goods availability, and the numerical strength of the respective class. The first two variables feed the interest of an agent directly in utility fashion. The last variable is included as it relates to the extent to which agents are able to realise their interests (98). Here the author mixes up the objective function itself (utility or elementary interest) and the structure or means (such as elections) through which it is maximised. Anyway, the presence of 'class mates' is assumed to have a positive effect on the elementary interest of an economic agent. Thus, an elementary interest function is basically a utility function featuring externalities. Van Winden also specifies the functional form, taking it as of the Cobb-Douglas variety.

Firms are now assumed to act in accordance with the capitalists' interest. More precisely, firms maximise the capitalist elementary interest function. The state, however, is assumed to maximise a weighted average of elementary interests with the weights representing the power of the four classes. In Van Winden's terminology, the state acts in accordance with the maximisation of a
'complex interest function' (101, 109). Thus, a complex interest function is a weighted average of utility functions, which is clearly nothing but a social welfare function.

As regards the model, the Van Winden Interest Function Approach amounts to, essentially, a respecification of the state's objective function. Yet all the equations are reproduced. An unrelated but simultaneous change elsewhere in the model is the introduction of some minimum payment in the before-tax incomes of capitalists (110, 115). 'Equilibrium' is still defined by the condition of 'the constancy of all variables over time.' Although the present model closely resembles the preceding one, the whole 'equilibrium' analysis is done over. Changes are reported in the labour share of disposable income (126) and in the domains of the political weights in the social welfare function or in the 'types of state' that bring about certain 'equilibrium' values of model variables (128-132).

While the modelling of the private sector has been straightforward - agents maximise their elementary interest functions - the treatment of the state is more complex since it involves political weights for the various elementary interests. The weights reflect the class structure of the state and are clearly significant for the distribution of income and so on, as will be implicit in model outcomes. To pave the way for closure of the theory in the sense of explaining the weights in the social welfare function, the political process is modelled. The purpose is to determine the character and relative power of incumbent and opposition parties and the room of politicians to promote their interests vis-à-vis the bureaucrats. While the bureaucrats are linked directly to their own elementary interest function, the parties are reduced to elementary interests by their class structures, as the author suggests (166).

The determination of the state organism is through voting and government coalition formation. Using their elementary interest functions voters value political parties' performances. In case of coalitions ratings are apportioned by size. To allow for habit formation, the valuation is made dependent on the previous choice. Rather than absolute determinants of choice, the valuations are merely taken as likelihoods to prevent uniform behaviour of same type voters. Here the author assumes a logit specification (148).

After the elections, a cabinet must be formed. The basic idea is that some parties which command a majority form a coalition which they find attractive. The attractiveness of a coalition for a party, say \( o_h \), is a weighted average of the attractiveness of the constituent parties \( o_j \) for \( o_h \), which in turn, are speculated to be indicated by the rate old \( o_h \)-voters drifted away to \( o_j \) (171). In other words, parties find competitors to which they lose voters attractive and are eager to form a coalition with them.

To recapitulate, on the basis of their elementary interest functions, old
$o_h$-voters valuated parties $o_i$ which determined the likelihood of floating to $o_i$ at election date $T$. These floating rates are taken as $o_i$-attractiveness indicators, $Q_{o_h o_i}(T)$, as perceived by party $o_h$. For example, if

\[
\begin{align*}
Q_{o_1 o_1}(T) &= 0.6 & Q_{o_2 o_1}(T) &= 0.3 & Q_{o_3 o_1}(T) &= 0.1 \\
Q_{o_1 o_2}(T) &= 0.3 & Q_{o_2 o_2}(T) &= 0.2 & Q_{o_3 o_2}(T) &= 0.1 \\
Q_{o_1 o_3}(T) &= 0.1 & Q_{o_2 o_3}(T) &= 0.5 & Q_{o_3 o_3}(T) &= 0.8
\end{align*}
\]

then the first column shows that most old $o_h$-voters remained loyal, but many floated to $o_2$ and only a few to $o_3$. Therefore, party $o_1$ is assumed to find $o_2$ attractive. Now let the numbers of parliamentary seats of parties $o_1, o_2$ and $o_3$ be 20, 40 and 40 (173). Then there are four majority coalitions to consider, namely:

\[
\begin{align*}
\Delta_1 &= \frac{1}{3} o_1 + \frac{2}{3} o_2, \\
\Delta_2 &= \frac{1}{3} o_1 + \frac{2}{3} o_3, \\
\Delta_3 &= \frac{1}{2} o_2 + \frac{1}{2} o_3, \text{ and} \\
\Delta_4 &= \frac{1}{5} o_1 + \frac{2}{5} o_2 + \frac{2}{5} o_3.
\end{align*}
\]

Thus, the first coalition, $\Delta_1$, consists, in numbers of seats, one third of party $o_1$, and two thirds of party $o_2$. Van Winden assumes that the attractiveness of this coalition for party $o_1$ is a geometrically weighted average of the constituent party attractiveness given by the first column of the previous matrix: $0.6^{1/3} 0.3^{2/3} = 0.38$. Note that the power weights are simply taken to be proportional to the numbers of parliamentary seats of the parties. Reweighting the party attractivenesses of the first column for the second coalition, we obtain $0.6^{1/3} 0.1^{2/3} = 0.18$ as the attractiveness of coalition $\Delta_2$ for party $o_1$. By assumption, the attractiveness of coalition $\Delta_3$ is neglected for it excludes party $o_1$. Lastly, the attractiveness of the grand coalition, $\Delta_4$, for party $o_1$ amounts $0.6^{1/5} 0.3^{2/5} 0.1^{2/5} = 0.22$. The party $o_i$ ratings of the four coalitions are collected in the first column of the so-called coalition attractiveness matrix (176),

\[
Q^r = \begin{bmatrix}
0.38 & 0.23 & \cdots \\
0.18 & \cdots & 0.40 \\
\cdots & 0.32 & 0.28 \\
0.22 & 0.31 & 0.23
\end{bmatrix}
\]
The attractivenesses of the coalitions for party $o_2$ are obtained by weighting entries of the second column of the $Q_{o_2 o_2}(T)$-matrix and reported in the second column of $Q'$. The third column of $Q'$ represents party $o_3$'s valuation of the coalitions.

The attractiveness matrix, $Q'$, is used to determine which coalition is formed. Here an equilibrium coalition must, by Van Winden's definition, be undominated. A coalition $\Delta_s$ dominates $\Delta_r$ if all participants of $\Delta_s$ value their coalition higher than $\Delta_r$. In other words, the entries of the $s$-th row of the coalition attractiveness matrix, $Q'$, exceed the respective entries of the $r$-th row. For example, coalition $\Delta_3$ dominates coalition $\Delta_1$. Therefore, $\Delta_1$ is not undominated and, by definition, it is no equilibrium coalition. Parties which command a majority ($o_2$ and $o_3$) prefer another coalition ($\Delta_3$). Note that coalition $\Delta_1$, in turn, dominates $\Delta_2$ which is, therefore, no equilibrium coalition either. It is even more remarkable that $\Delta_2$ dominates $\Delta_3$. Thus we have a cycle in the pattern of domination which clearly is no transitive relation. This cycle rules out the first three coalitions as equilibrium candidates. The remainder $\Delta_4$ is no equilibrium coalition either as it is dominated by $\Delta_3$.

The elementary interest functions of the voters, and the consequent valuations of parties and floating between them, determine an attractiveness matrix which admits no undominated coalition. By Van Winden's definition, there is no political equilibrium and his model cannot be solved in the present example. If, however, old $o_2$-voters would not have floated so much to $o_3$, say $Q_{o_2 o_2}(T) = 0.5$ and $Q_{o_2 o_3}(T) = 0.2$ instead, then $o_2$'s valuation of coalition $\Delta_1$ would increase from 0.23 to 0.42. The other rates of the second column of $Q'$ would be unaffected, as would be the first and third columns. In this case the first coalition $\Delta_1$, is most attractive to both its participants, $o_1$ and $o_2$. Thus, parties $o_1$ and $o_2$ would form the government and influence the weights in the social welfare function vis-à-vis the bureaucracy in accordance with the preferences of their own constituencies and, by assumption, proportionally to their relative parliamentary strengths.

The last model pulls everything together, making some ad hoc simplifications and specifications in the process. Since the Van Winden Interest Function Approach reshaped, in effect, the state by reducing its social welfare function to class interests, the last model is essentially the same as the third model with, however, endogenous weights in the state's objective function. More precisely, the third model is modified as follows (205-207):

a. Elementary interest functions subsume an infinite time preference for workers and unemployed who consequently ignore the future, but a time horizon for capitalists extending two periods into the future. “The investment process forces them to look into the future.”
b. The economic position is fixed once and for all for capitalists and determined by the labour market for all others.

c. There are two, exogenous, political parties.

d. When one party is incumbent, the weights in the social welfare function assume exogenous values.

e. Since there are only two parties, the government is simply formed by the winner.

f. Weights are specified for incumbency in the "expected interest realization ratings of parties" (226).

An equilibrium is defined by "the constancy of all variables (in the economic as well as political sphere) over time and the existence of a dominant party" (208). Note that in general, when there are more parties, the dominance requirement voids the definition. In the present case the combination of 'equilibrium' conditions implies that one party is dominant once and for all (209).

The equilibrium analysis is poor; propositions merely entail that most previously derived properties carry over to the present model, some properties no longer hold, and values of some variables are affected. In other words, endogenising the weights in the social welfare function and specifying structural variables invalidate some old results and change some parameter values. From the viewpoint of theory, the model's explanatory power is not increased. "The main consequence is that an equilibrium need no longer be an equilibrium for more than one type of state" (227). But, since closure as well as specification deceive - witness modifications a through f - they need to be justified in terms of explanatory power. This basic requirement is met neither by the 'main consequence' quoted here, nor by the other propositions.

After the presentation and analysis of his complete politicoeconomic model, Van Winden provides some musings on pressure groups. The author defines pressure as deliberate attempts by agents in the private sector to influence the state. The influence manifests itself as constraints on the activity set of the state; the author refers to his concept of 'interaction' (229). "Any rather comprehensive analysis of the interaction between state and private sector of advanced capitalist economies should pay attention to the fact that huge organizations have developed that cannot be considered as insignificant and anonymous to the state" (230).

Since the author finds direct modelling of pressure as constraint generators too complex, he takes a roundabout approach to the problem. Instead of dealing explicitly with constraints, he augments the interest function. Thus, let the interest or objective function of collectivity c be $P_c$ (233). Subject it to pressure group p. Then the author represents the constraints exercised by p onto c by assuming that c acts in accordance with the maximisation of the so-called augmented interest function
\[ p^1 - \lambda p^\lambda_p \]

where \( \lambda \) indicates the strength with which the interest of \( p \) are represented (233). Note that, taking logarithm and dividing through, an equivalent objective function is

\[ \log P_c + \mu \log P_p \]

where \( \mu = \lambda/(1-\lambda) \) is the Lagrangean multiplier which arises in the problem: maximise \( (log) P_c \) subject to the constraint that \( (log)P_p \) is at least equal to some minimum value. This latter problem, indeed, is a precise representation of pressure exercised by group \( p \) onto collectivity \( c \). Unfortunately this justification of the 'augmented interest function' is missing in the thesis. Essentially, the Van Winden Augmented Interest Function Approach to pressure is nothing but the Lagrangean representation of a constraint in maximisation.

Although Van Winden introduces, presents and discusses his augmented interest function, he does not incorporate it in his model. If the author would mean that pressure does not belong to the subject of economic modelling and, therefore, can be left alone, he ignores the fact that allocation of scarce resources takes place to a large extent through political decision-making such as lobbying.

Let us judge the book by its own standards. In other words, does it present a nonnormative, theoretical analysis of the interaction between state and private sector in a capitalist economy? Van Winden's pressure musings confirm that his interaction concept was wrongly defined and, instead, should be that of a generalised game in Debreu's social equilibrium analysis. The latter theory, though old, is more solid and promising than the present one. Van Winden's analysis fails to meet a number of theoretical requirements.

Economic laws, such as of supply and demand, are inserted at the wrong level of analysis, namely the assumptions rather than the propositions. The author does not have the definitions straight. Equilibrium is confused with stationarity and game-theoretic equilibria are not clearly distinguished either. Another annoying shortcoming at the conceptual level is the author's substitution of seemingly novel notions for established concepts. After elimination of errors and some further analysis his 'interaction,' 'elementary interest function,' 'complex interest function' and 'augmented interest function' simply relate to the orthodox notions of general game, utility function, social welfare function and Lagrangean function. In the first cases the author alludes to this correspondence in a footnote, but more modest use of 'new' concepts in the body of the text would enhance readability (275).

The specification of economic relations is the next weak spot in this disserta-
tion. First, the degree of specification is too high for a theoretical treatise. Second, the author is opportunistic in switching from neoclassical specifications such as the Cobb-Douglas function to classical ones such as the Leontief function and back again if convenient. He is so ruthless in his exercise that all kinds of asymmetries are implicit in his models such as in the time preference of workers versus capitalists, the inputs and their productivity in the state versus the private sector, and the utilisation of various resources. These features are not questioned by the author.

The organisation of the book as a sequence of models is pedagogically promising but, unfortunately, not successful. Besides making the book too thick, refinements and 'novelties' such as production relations between the state and the private sector as well as the Van Winden Interest Function approach, have impact which is difficult to trace, due to unrelated but simultaneous changes elsewhere in the models, such as the introduction of time. Incidentally, the treatment of 'time' is so rudimentary that the simple device of dating commodities is feasible, which would facilitate equilibrium analysis of plans agents make at time zero contingent upon possible realisations. This so-called Arrow contingency analysis would be more appropriate than the author's 'expectations without stochastics.'

The use of game theory is also weak. For example the assumption that voters apportion coalition partners’ performance ratings by size underestimates the power of parties that tip the balance. Game theory provides rules for ascribing power more accurately, such as the so-called Harsanyi-Shapley Nontransferable-Utility Value. Moreover, the fact that voters’ valuations may produce no undominated coalition of winners should not break down political equilibrium analysis altogether as it did in the example described. More liberal equilibrium definitions such as the so-called von Neumann-Morgenstern solution concept, determine sets of possible coalition outcomes. Although such concepts offer no unique outcome of the political game, they are more widely applicable than Van Winden's definition of political equilibrium. Once more, his specification is too restrictive.

My main critique applies to the core of the book: the Van Winden Interest Function Approach. Collectivities, the state in particular, are modelled as if they maximise the utilities of the constituent classes, weighted according to the power balance. Certainly, the class structure and political power balance are thus crucial determinants of the political and economic outcomes. But, whatever the weights, participants cooperate to maximise some average of their utilities, thus securing a Pareto efficient allocation. The 'Interest Function Approach,' for given political weights, yields a Pareto optimum, and variation of the weights is essentially a device for scanning the efficiency frontier, the hallmark of normative theory. The incapability to describe inefficiencies in the interaction between state and private sector is a serious shortcoming of a theoretical analysis that pretends to be nonnormative.

This book is barely a contribution to economic analysis.
Summary

This article reviews Frans van Winden's Ph.D. dissertation, *On the Interaction between State and Private Sector: A Study in Political Economics*, State University Leyden, 1981, viii + 319 pages. The proclaimed objective of the book is to present a nonnormative, theoretical analysis of the interaction between state and private sector in a capitalist economy. Review of the analysis leads us to conclude that the objective is not met.

THE INTEREST FUNCTION APPROACH: A REPLY

In this reply I will first go into Ten Raa's main critique concerning the Interest Function Approach. I will then present my main critique on his article, and end with some final remarks. Numbers in parentheses refer to the sections of Ten Raa's article.

1. Ten Raa's main critique (8): "Collectivities, the state in particular, are modelled as if they maximise the utilities of the constituent classes, weighted according to the power balance (.) thus securing a *Pareto efficient allocation*" (emphasis added), "The incapability to describe inefficiencies in the interaction between state and private sector is a serious shortcoming of a theoretical analysis that pretends to be nonnormative." In order to show that this main critique makes no sense at all, I will first remind the reader of the definition of a Pareto efficient allocation and then shortly discuss the way that the state operates according to the Interest Function Approach.

A Pareto efficient allocation demands that it is not possible to increase the welfare (utility) of an individual without hurting the welfare of someone else. In case of state-provided collective goods it is, more specifically, demanded that the sum over all individuals of the marginal rates of substitution between a collective good and a private good equals the marginal rate of transformation between these goods (Samuelson's efficiency condition). Now, will the state as conceived of in the Interest Function Approach realize a Pareto efficient allocation as contended by Ten Raa? Definitely not. According to that approach the people that man the state organization (state sector workers: bureaucrats and politicians) strive after their own interests. People outside the state organization will only succeed in getting their interests promoted by the state to the extent that they accumulate enough pressure on state sector workers so that a 'vested-effective-interest,' or an 'acknowledged power,' is established. Only in