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Andreas Freytag and Simon Renaud

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Wirtschaftswissenschaftliche Fakultät
Friedrich-Schiller-Universität Jena
Carl-Zeiß-Str. 3, 07743 Jena
www.wiwi.uni-jena.de

Schriftleitung:

Prof. Dr. Hans-Walter Lorenz
h.w.lorenz@wiwi.uni-jena.de
Prof. Dr. Armin Scholl
a.scholl@wiwi.uni-jena.de

"From Short-Term to Long-Term Orientation – Political Economy of the Policy Reform Process"

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by Andreas Freytag and Simon Renaud*

Abstract:

Despite the fact that policymakers often have a short-term horizon and prefer discretionary over rule bound policy, one can observe policy reform with a focus on rules and long-term orientation. Sometimes reforms are driven by crisis, sometimes they are pursued in times of relative prosperity. The paper analyses reform processes theoretically under the assumption of imperfect knowledge.

After the introduction, the second section of the paper shows that rule bound policy encourages a long-term orientation of policymakers, resulting in higher economic dynamics as compared with discretionary policy. In the third section, the political economy of the reform process, i.e. replacing discretionary by rule-bound policy, is analysed in an evolutionary setting. The basic hypothesis is that a policy reform is triggered in a feedback-process determined by four key factors: (1) an emerging shadow economy and growing corruption, (2) external, in particular international pressure, (3) increasing knowledge of policymakers with respect to the effectiveness of policy paradigms and (4) improved economic knowledge of the public. In a fourth section, we draw conclusions and present some preliminary empirical evidence.

Keywords: Dynamic Learning Process, Long-Term-Orientation, Rules, Consistency, Political Business Cycles, Policy Reform

JEL-Classification: D72, E61

* Friedrich-Schiller-University Jena, Chair of Economic Policy II, Carl-Zeiß-Str. 3, D-07743 Jena, Phone: ++49 3641 943 250, Fax: ++49 3641 943 252, e-mail: a.freytag@wiwi.uni-jena.de, s.renaud@wiwi.uni-jena.de.

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"From Short-Term to Long-Term Orientation – Political Economy of the Policy Reform Process"

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I. Introduction

Economic policymaking is often driven by short-term interventionist activities, which on average causes serious economic problems. The explanations for continuous discretionary policies is of political economy nature. Indeed, it seems plausible that policymakers perceive the public's problems of forecasting future policy paths as an advantage, which they can exploit to e.g. appear as the active caring politician willing to offer a remedy to market failure or to produce a short-term upswing within the election cycle. This may give them a competitive edge over their political rivals. Thus, political rationality is deviating from economic rationality.

This deviation may carry on for a long time. Despite the negative effects of discretion, it can be observed that a paradigm shift towards long-term-orientation takes much time. Nevertheless reforms happen and can be only partly explained by political economy models: The standard explanation of reforms in such models is either decreasing opportunity costs of counter-lobbying or pathological learning, i.e. the increasing need to change the situation because of its permanent worsening. Not much room is given to active learning processes and the problem of limited information and knowledge both of politicians and other policy actors.

In this paper, we are particularly interested in theoretically analysing learning in politics and *reform processes* by means of positive economics. Our main hypothesis is that learning processes – both active and pathological – drive the process towards a policy reform. Therefore, – and contrary to the standard political economy assumption of perfect knowledge – we introduce imperfect knowledge into the analysis of the policy process. Policymakers as well as the public are not fully informed. At the same time it allows for active learning – as

opposed to pathological learning – and may us equip with an argument to explain changes in the policy regime with other than pathological explanations.

The second section of the paper briefly justifies the claim of long-term oriented economic policy being superior to discretionary policy and being equivalent to rule-bound policy. However, it is not easy to implement rules in an institutional setting with selfish and politically rational actors, given the situation is correctly analysed by political economists. An appeal to the politicians to behave long-term oriented completely seems pointless and self-referential, as it requires to abandon the very conditions having led to the short-term orientation (Witt 1992). Nevertheless, one can observe the introduction of policy rules to an increasing extent, indicating a growing long-term orientation. Section III of the paper positively analyses the conditions under which such a shift towards rules can occur. The political economy logic suggest to view the problem as a process with different ways to learn. Some preliminary empirical evidence is given in the conclusions.

II. Rules as long-term orientation

Economic theory (from different schools of thought) as well as empirical evidence can show that arbitrariness and short-term horizons in economic policymaking regularly cause more economic harm than benefits. The normative conclusion is straightforward: economic policymaking should be long-term oriented¹ and not simply interpreted as a means to do away with market failure and to stimulate the economy in the short run; it is also not sufficient to reduce it to a number of instruments in different fields.

This conclusion leads us to the recommendation to restrict the discretionary leeway of policymakers by policy rules. By rules, we understand constitutional policy rules in the sense of Brennan and Buchanan (1981) to bind politicians. The rules should be designed according to current and empirically founded economic knowledge. Too precisely formulated rules, such as rules for certain authorities what to do when in which case, e.g. Friedman's k-percent-rule for monetary policy, are not included, as they suggest that economic knowledge is

perfectly fixed and not subject to changes due to learning. An example for a constitutional policy rule is an independent central bank: the policy instruments to meet a given objective (price stability) are chosen according to current knowledge. This understanding does not exclude stabilisation policy as an answer to an external shock with a subsequent recession, provided it is according to set of rules for economic policymakers.

Why is a binding rule better than discretionary policies and in how far represents the rule a long term view while discretion means reacting short-sighted? There are mainly two theoretical arguments to apply binding rules rather than discretionary policies in economic decision-making. These are the problem of time-consistency and the problem of the political business cycle.

The time-consistency problem originates from Kydland and Prescott (1977). The basic conclusion is that, if the government does not follow any rules, a politically optimal policy at one point of time does not remain the optimal policy at a later point of time, although nothing in the framework has changed. The result is discretionary policymaking by the government as this change of optimal policies occurs repeatedly. The government is trying to mislead the public for its own good, i.e. it announces a certain policy for a period which the public should believe and afterwards, surprise, the government changes the policy. This is optimal now as the public already made its economic decisions according the earlier announcements and cannot change the decisions anymore. Optimal policy, where the public expectations have not build yet, differs from optimal policy after the public has made its decisions. As individuals learn, they will not trust the government's announcement a second time and will anticipate this governmental behaviour. Consequently, the economic outcome will be worse than planned as discretion does not create the surprising effects it intends to, while the costs of volatile policies, e.g. lower investment by private agents due to insecure future, remain.

The problem of time-consistency may be analysed by applying game theoretic methods, following, for example, Persson (1988, pp. 520ff) and

¹ The long term is difficult to define. We assume it being significantly longer than the election cycle.

Blackburn/Christensen (1989, pp. 14ff)². In a one shot game with full information, the government will announce a certain policy which is welfare-optimizing at this point of time, taking into consideration that public expectations have not been formed yet. After the public has built its expectations, the optimal welfare-maximising plan changes, as the public behaviour to the policy cannot change anymore. But with the public also fully informed and having rational expectations, it will expect this behaviour. The result in this case will always be pareto-inferior³. Only precommitment to a certain policy rule, meaning that the government does not change the plan during the period, so the public expectations are being fulfilled, will lead to the best result. Of course, the rule has to be credible, so „reoptimising“ policy has to be costly for the government.

The problem of time-consistency gets less severe when infinitely repeated games are applied to the problem. In this case, even without strict precommitment, it becomes less attractive to leave the announced policy, as this will have impacts on the future. If the government changes its preannounced policy, the public will „punish“ the government by expecting the government to „cheat“ in the future, i.e. the government loses „reputation“ in future periods, resulting in inferior economic outcomes.⁴ The government has to weight the profit of deviating from the announced policy, i.e. gaining today, to the cost of lost reputation, i.e. losing tomorrow. As normally the future counts less than the present in policymaking, the economic outcome with reputation lies in between the result of discretion and rule binding, so the rule remains the best long-run solution.⁵

The binding rule gets more important in a situation with repeated games without perfect information where the public learns only gradually which policy

² They analyse the time-consistency problem in monetary policy, where the government's welfare function is dependent on unemployment and inflation. Lower unemployment than the natural rate is only possible by creating surprise inflation, which means „misleading“ the public.

³ For the case of monetary policy, the problem of time-consistency will lead to high inflation without affecting the natural rate of unemployment.

⁴ For example, after one period of surprise inflation, trade unions will expect higher inflation in the future; therefore they will demand higher wages resulting in higher unemployment.

⁵ To be exact, the result in the reputational process depends on how the future is discounted (Barro and Gordon 1983).

the government is trying to follow. Now credibility as a signal is very important, if the government wants to behave welfare-maximising and the most credible solution remains the rule to show the learning public that the government is not trying to cheat.

Not only the problem of time-consistency requires binding rules to avoid economical inferior results from political decision-making in the long run. As public choice theory teaches us, governmental behaviour is not always welfare-maximising as politicians have their own goals, which may differ from the economically best ones. Nordhaus (1975) describes the incentive for policymakers to adopt discretionary, surprising instruments in the sight of elections to stimulate the economic performance to win the election. The costs of this policy, e.g. high interest rates for debt financed programs, higher inflation by expansive monetary policy, recessions etc. have to be paid after the election.⁶ This is the concept of political business cycles, explaining economical fluctuations as at least partly caused by discretionary policymaking. A binding rule, from which it is costly to deviate, would prevent the policymaker from creating fluctuations if the cost of deviating from the rule, i.e. lost reputation resulting in the loss of votes, is higher than the benefit, i.e. winning votes due to a business cycle peak before the election.

As a result so far, the problem of time-consistency as well as the problem of political business cycles demand for credible binding rules in fields where it is possible for policymakers to deviate from a preannounced policy to get short-term advantages (i.e. discretion) without considering the long term drawbacks on the same level. Predictable, credible, long-term oriented policy will create better outcome than a policy which is trying to follow some period wise optimisation.

Empirical results for fields with binding rules show evidence for the theory. Research so far concentrated on the problem of time-consistency in monetary policy, where the pre-committing strategy is identified as an independent

⁶ Note that it is crucial for the original Nordhaus concept that the public does not realize the routine in the governmental behaviour. With rational expectations and full information, there will be no positive effect on the business cycle (see e.g. Nordhaus 1989). With rational expectations but without full information, the possibility of political business cycles returns (Rogoff and Sibert 1988).

central bank which does not try to lower unemployment by creating surprise inflation. Most research finds robust empirical support for the theoretical view that inflation is lower in countries with independent central banks, though other effects on the economy (e.g. growth) are less clear according to the literature.⁷ Saade (2002) adopted the discretion vs. rules problem to the tax policy. As in the problem of monetary policy, without commitment the government chooses discretionary policy, creating unexpected tax changes. Empirical evidence for the US shows that unexpected tax changes lead to lower growth. A binding rule, where no unexpected tax changes exist, would be better in the long term.

This does not imply that a rule has to remain the same for good. As time goes by, the economic knowledge evolves, old concepts seem to be not valid any more or even to be wrong, and new ideas turn out to be best practice. Therefore, a rule has to be changeable, if new knowledge or new situations come up. Still, it has to be costly to change the rule, as otherwise discretionary policy may return. But if the knowledge about the rule has changed, and it is important new knowledge, the benefits of implementing the new rule will probably outweigh the costs.

We have shown so far that in the long run, the optimal plan from the unrestricted politician's point of view does not create the best possible outcome as he has an incentive to optimise discretionarily for short periods. Binding rules limit the possibility of short term optimisation, leading to better outcomes in the long term. These frameworks explain why politicians have a strong incentive to act discretionarily, explaining some of the economic problems many countries are facing, e.g. high inflation and high taxes with low growth. But how works the transition from discretion to long term oriented rules and why do politicians give away some of their influence?

III. Policy reform as “evolutionary” path to “revolution”

According to standard political economy reasoning, in section II we view the government as a group of selfish and utility maximising individuals. On the so-called political market, policymakers respond to demand for special treatment,

⁷ See, for example, De Haan et al. (2003). For an overview of existing empirical

thereby granting advantages to well-organised groups at the expense of less organised groups (Olson 1965). In this section we additionally assume that the policymakers are suffering from a substantial lack of information, from unclear preferences and from a selective perception of the reality. Therefore, their decisions are characterised by erroneous evaluation of the situation at hand and by an incomplete and selective process of information generation (Witt 2003, pp. 79ff)⁸. The same holds with all other actors. In our analysis these are lobbies, representing special interests, scientists, policy advisors, external actors such as foreign governments as well as international organisations and the public.⁹

Before we look at the process itself, it makes sense to distinguish between knowledge and information, which is a distinction between stock and flows. We define knowledge as the sustainable stock of information, which the individual has accumulated and filtered from the permanent inflow of information. The inflow of information does not add unlimitedly to the knowledge, as the human mind is limited with respect to its information processing capacity. Following Witt (1996), we make the following assumptions about individual information processing:

1. limited long-term memory; accumulated knowledge may be written off;
2. limited short-term memory constraints information processing capacity;
3. selective attention process;
4. interpretation pattern follows existing rather than new knowledge;
5. attention and interpretation pattern follows existing preferences.

Preferences play an important role for the learning process. It is dependent on the preferential structure, which information is processed and which is not considered. Witt (1996) distinguishes the shift effect, i.e. the attention given to information shifts away from hitherto less intensively perceived information, and the refinement effect, i.e. more attention is given to already intensively

literature, see Berger et al. (2001).

⁸ For our purpose, the distinction between maximising and satisficing behaviour is not decisive. See Meier and Durrer (1992) for a careful discussion of the behaviour of politicians within the framework of a cognitive image of man.

⁹ We concentrate on individual learning in contrast to institutional learning.

perceived information.¹⁰ We follow this distinction, as on the one hand it pretty much explains, why new information about economic relationships only slowly (if at all) reaches the attention of policymakers. On the other hand, this explanation does not exclude the perception of new and better information. It only can explain the sticky nature of familiar knowledge, which is according to the preferences – and sometimes prejudices and ideologies – policymakers have.

We also introduce the time dimension explicitly, which is in Figure 1 illustrated by the bold broken arrow between the field *Discretion* and the field *Rules*. This framework enables us to model a process comprising of active as well as pathological learning, which can produce hypotheses about the speed with which this process ends in a policy reform, implying an increasing long-term orientation. In light of these preliminaries, we now discuss the “evolutionary” feedback process including the different actors, finally leading to the reform step as the “revolution”.

The process of pathological learning

In a political economy setting, the policymakers’ preference for discretion is highly plausible. We start by assuming a policy framework with a high degree of discretionary leeway for the government with respect to economic policymaking. Examples are a dependent central bank, an intervention prone social security system and ad-hoc fiscal policy. The question then is, whether and if so, how an economic policy reform and the implementation of policy rules, which is the plausible normative policy conclusion, theoretically can happen.

As shown in section II, such a policy environment is likely to cause economic problems, i.e. inflation tends to be substantial, social security arbitrary, fiscal policy unsustainable and unemployment high. Given the incentive structure of the main actors, their selective perception and limited knowledge, we do not

¹⁰ In contrast to standard analysis, one may also argue that preferences themselves also are subject to changes. However, changes in preferences take a long time and are more difficult to model than information based learning, albeit using the same categories of effects.

expect that they change their policy model due to this experience immediately. Instead, a feedback process with action and reaction begins.

Let us start within the standard political economy framework, leaving the capacity of politicians to actively learn aside for a moment. The above mentioned scenario will produce reactions from the different actors. To start with the government, it is not willing and able to pursue a policy reform; instead, its most probable reaction is to intensify the interventions to mitigate the problems; one example may be to increase taxes to raise revenues. Interest groups unwilling to give up their privileges demand for more ad-hoc action and increasing public spending to solve the problems, which does not improve the economic performance of the country.¹¹ The gap between political and economic rationality increases during this process.

The worsening of the economic situation leads to private agents facing decreasing opportunity cost of activities in the shadow economy. Therefore, their size will probably rise, both relatively with respect to GDP and absolutely.¹² With a growing share of shadow economy, the effectiveness of economic policy decreases, worsening the economic performance of the country even further. This in turn will induce a number of reactions. It is plausible that the government will take measures against the shadow economy. Thereby, it has two different options: direct and indirect measures. Without active learning about the concept of opportunity cost, the government will directly intervene and e.g. intensify control and/or equip the tax bureaus with better resources to search for tax evasion. In addition, it can take steps to raise the sanctions against agents in the shadow economy. The likely reaction of the public is less activities in the shadow economy, leaving people worse off as they on the one hand lose income in the shadow economy, and on the other hand remain unable to generate higher income on the regular markets. Thus, aggregate activities in the regular markets also tend to decrease as consequence of the reduced aggregate purchasing power (Schneider and

¹¹ Interest groups, whose members suffer from the policy will certainly invest into counter-lobbying to change the policy. The worse their situation, the lower the opportunity cost of counter-lobbying (Becker 1983 and 1985). However, it is not clear whether such activities are leading to less discretion.

¹² For causes of underground activities see Schneider and Enste (2000, pp. 82-88).

Enste 2000, p. 78). Indirectly, we see another reduction of opportunity cost of shadow activities following the initial increase. Shadow activities will spur again; the government will probably react like before. As long as vested interests can receive net gains from the situation, they will support the government to stop this illegal form of competition.

A similar, but not identical feedback process is likely to occur with respect to corruption. Increasing interventionism in combination with fiscal problems and unemployment gives way to selective economic policy, e.g. industrial policy and trade protection and reduces resources available for public purchases facing a given supply side. Assuming that corruption was negligible before, increasing rent-seeking activities associated with selective policy measures as well as intensified competition for public procurement may have the consequence of corruptive behaviour (Mauro 1998).¹³

An increase in corruption is harmful to the economy, as the signal sent to private agents home and abroad deflects investment and reduces employment even more in the medium run. In addition, empirical evidence indicates that the structure of public spending changes with increasing corruption: bigger, unproductive projects are likely to raise more illegal income for the officials (Tanzi and Davoodi 1997). Unproductive public spending is contributing to deeper economic problems and thereby to the vicious circle.

It seems plausible and is supported by empirical evidence that underground activities and corruption are complementary. The more corruption one finds in a country, the higher is the share of shadow activities with respect to GDP (Schneider and Enste 2000, pp. 90f). Jointly, these two feedback processes are not only causing economic problems, but may also change the public attitude towards these activities and public behaviour. The public views about borderlines between immoral and tolerable behaviour may shift – shadow activities and corruption may become increasingly tolerable under the new institutional setting. Such a development is likely to increase the economic

¹³ Paldam (2002) shows that corruption is positively correlated with high regulation, high inflation and low per-capita GDP.

problems. The strength of such a shift may in turn be dependent on the extent to which the rule of law is generally accepted in the country.¹⁴

Without active learning, this process will end in the well-known Olsonian (1982) process of “decline of nations”, in which an external shock will be necessary to reallocate resources and power. In other words, learning takes place pathologically. This feedback process is shown in the lower part of Figure 1, illustrated by arrows no. 1 through 4 and can be summarised as follows: discretion leads to poor economic performance (1); this causes underground activities and corruption to increase (2); vested interests are trying to maintain their position (4); government interventions will increase, causing even deeper problems. Finally, a sclerotic society needs the external shock.

However, one can assume that forces are working in the opposite direction, namely to narrow the gap between political and economic rationality. Whereas in the foregoing analysis, this gap does not decrease, but increase over time, these forces enable politicians to narrow it via the introduction of policy rules. These forces are foreign influences and growing knowledge. The upper half of Figure 1 and arrows no. 5 through 9, show the factors completing the picture, which then changes remarkably.

Foreign scapegoats

To start with *foreign support* (see Figure 1), it is highly plausible to give up the implicit assumption of an isolated country with completely autonomous policymakers. Economic policy takes increasingly place within a global environment, implying that policy decisions in one country affect the economic situation in others. Discretionary domestic policy is even more risky than in the closed economy (Donges and Freytag 1998). In addition, politicians facing an economic slowdown and domestic policy constraints like those discussed above can make use of international agreements or foreign pressure to adopt a policy rule and give up discretion. At least in the long run, international

¹⁴ See Rose-Ackermann (1999, chapter 6).

pressures raise doubts about discretion (arrow no. 5 in Figure 1).¹⁵ In general, international agreements restrict policymakers to protect import competing industries or to run excessive public budget deficits; pressure by international organisations add to these policy constraints. Both forms can be taken as scapegoat to overcome vested interests (Vaubel 1991, Freytag 2002, pp. 172-5). External sovereignty is traded to gain internal sovereignty. In the history of policy reform one can find overwhelming empirical evidence for this theory (see below). Nevertheless, international agreements are breached quite regularly before policy reforms are made, in other words it often takes a long time before governments make use of the described scapegoat function.

Active learning in the government and the public

Learning processes are not exclusively pathological, but are also influenced by increasing economic knowledge of both politicians and the public. If the government turns the wheel before the economic situation has become unbearable, we talk of active learning, which seems economically superior. Thus, one can construct an antagonism between these two concepts of learning. The strength of active learning depends on the relative strength of the shift effect and the refinement effect, which in turn are dependent on the following factors.

A free press and free universities with independent scholars (in other words: a market for information) will reduce both effects, as information will be very diverse and competing for the attention of policymakers. By contrast, a uniform press and politically dependent universities will not provide other information than one in line with the government's preferences. An additional factor working against the stickiness of knowledge and its structure is the fact, that the incoming information permanently changes with a worsening of the economic situation. These changes occur both with respect to the number of news as well as their intensity and thereby have a strong impact on the

¹⁵ In the short run, the opposite effect may also occur: the worsening of the economic situation is perceived as reaction to external competition. This perception encourages the government to protect domestic factors of production – which of course implies more discretion.

knowledge (and eventually even on the preferences) of policymakers and private agents (arrow no. 6 in Figure 1).

How does information cause *active learning* (see Figure 1) and, thus change political rationality towards a match with economic rationality? Assume that policymakers at the beginning of the economic recession feel quite comfortable with the situation. Discretion gives policymakers the opportunity to appear active and alert, which they prefer over the restriction of a rule, which gives them the impression of being a type of policy robot. They will seek advice from economists, social scientists, media and consulting firms sharing their preferences and ideology. One can even assume that seats in (formally independent) advisory boards and commissions will be preferably given to individuals who share the government's preferences. This advice will be given attention to and sold to the public as proof of good governance; given assumptions 1 to 5 above, they are also perceived as good governance by the government itself (refinement effect). The advisors – being as limited as the government and being interested in further appointments – will not argue against the government. On the one hand, the process increasingly becomes self-referential. On the other hand, still assuming an ever worse economic situation, the process will come to a natural end, as active learning starts.

As long as the economic situation is slightly acceptable, advice in the opposite direction will be given less to no attention (shift effect). However, increasing empirical evidence about negative effects of discretion and positive effects of rule-bound policy changes the relative weight of opposing information: first, it becomes increasingly difficult for policymakers to immunise themselves against bad news about the negative effects of discretionary interventions. They increasingly learn about economic relationships. At the same time, the knowledge about these relationships increases, as research efforts to overcome the bad economic situation are intensified.¹⁶ Among politicians doubts are rising about the effectiveness of the discretionary, short-term

¹⁶ Science as such can also be seen as feedback process, both internally and considering developments in reality. Research efforts may not only result in fundamentally new ideas, but also in better presentation of ideas, which are common sense in academia, but not yet in politics and in the public.

oriented policy (arrow no. 7 in Figure 1). Both the shift effect and the refinement effect now start to work in the opposite direction.

These doubts are not sufficient for giving up the policy direction; nevertheless, political arguments for discretion are weakened. Second, learning takes place in the public. Provided with better theoretical and empirical arguments, the public gathers new knowledge (arrow no. 8 in Figure 1). The burden of proof will probably be reversed, implying that those vested interests being politically supported at the expense of others, have to argue their case more carefully and feel pressure by the public (arrow no. 9 in Figure 1). The increased knowledge will enable the public also to exert pressure on the government, at least indirectly through the coming election (arrow no. 10 in Figure 1).¹⁷

At the same time, politicians of the government as well of the opposition may take steps to learn actively and to introduce reform as a result of political competition. Politicians then act as Schumpeterian entrepreneurs, offering new products. Thus, political competition can encourage policy reform, as politicians eager to be (re-)elected try to convince the public of new policy approaches. Given that short-term orientation has proven pointless, this search for an alternative can result in long-term orientation. However, it is not a priori clear, whether or not political competition results in welfare improvement or not. The classical political economy argument is that political competition results in welfare losses, as politicians try to offer (new or old) political products that serve special interests, thereby exploiting the lack of knowledge and high opportunity cost of counter-lobbying in the public (Freytag 1995, p. 241). On the other hand, Wohlgemuth (2000) – referring to Tullock (1965) – suggests that political competition with barriers to entry encourages political rivals to take risks and to offer radical reform proposals. The higher the barriers, the higher the promised benefits for the public.¹⁸

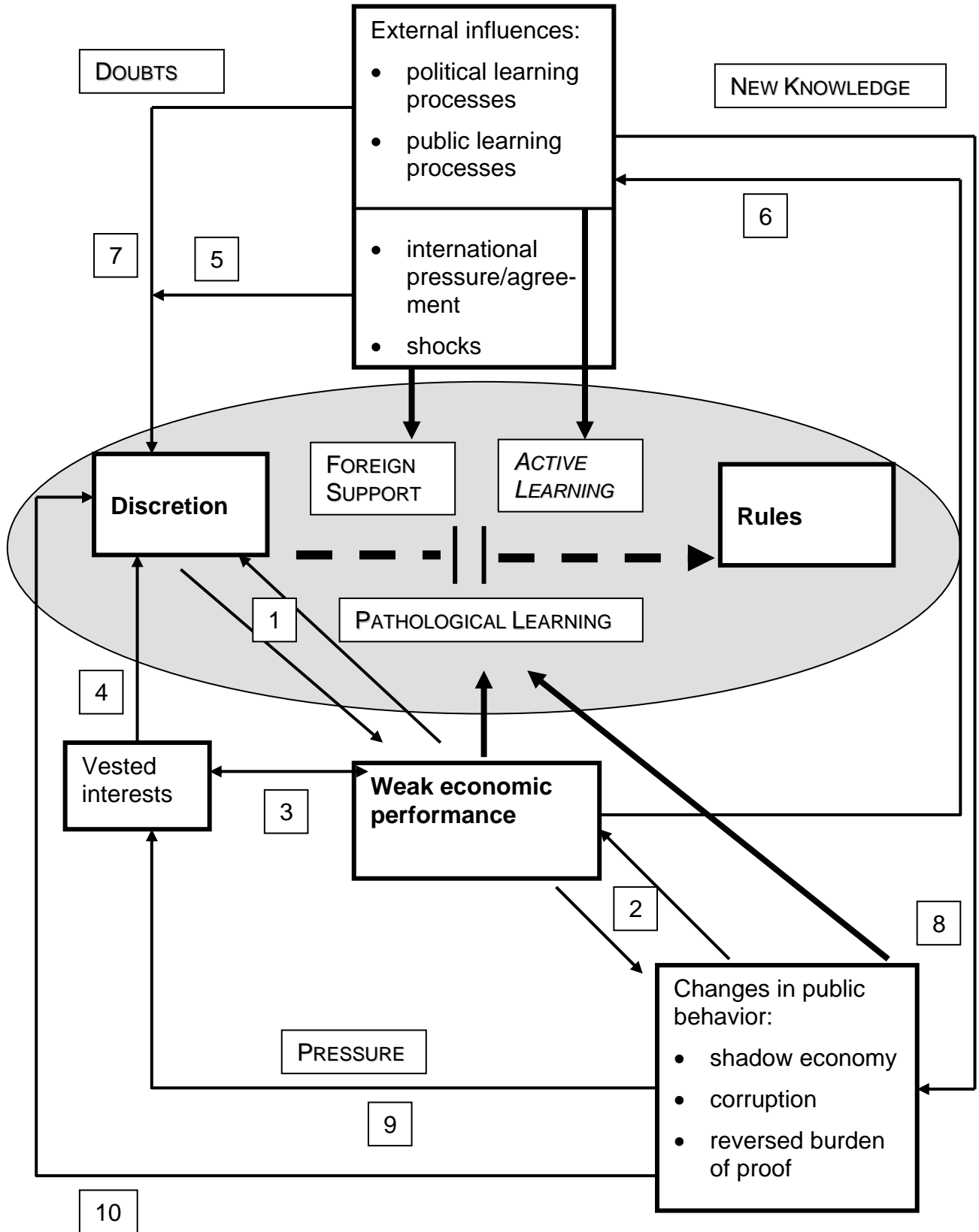
¹⁷ See Freytag (2002, chapter 8). Arrow no. 9 as well as arrow no. 10 can also be interpreted as the reaction of losers of the situation. The worse the economic situation, the lower the opportunity costs of lobbying for the losers (Becker 1983 and 1985). This effect is independent of active learning, it seems rather an example of pathological learning.

¹⁸ Which effect is more likely, is left to empirical research.

This process of active learning by both politicians and private agents will add to the process of pathological learning and foreign support. Although a precise prognosis about the relative strength of these processes is difficult to make, it seems plausible that active learning has to reflect the underlying economic problems, which of course takes time. Thus the pathological process as well as international pressure/support probably have a stronger impact in the short run. The process of active learning does not start without a certain lag.

None of the lines of argument put forward in this section so far, is fully new. However, jointly they provide a strong theoretical argument why policy reform towards a more rule bound policy can happen and how it is pursued. Despite the process character of learning, any policy reform is a structural break. In Figure 1, this break illustrated through the broken arrow connecting *Discretion* and *Rules* and marked through the grey circle. It is exactly this break (or as called in the heading to this section: shift from evolution to revolution), we focus upon in what follows.

Figure 1: The process from discretion to rule binding



The timing of the structural break

The theoretical considerations lead to some conclusions about the time of the process of shifting from discretion to rule-bound policy, in other words: from short-term to long-term orientation. In general, this time depends on the absolute relative strength of the arrows no. 1 to no. 10 in Figure 1, which itself depends on the institutional constraints in the country.

First, we discuss the absolute strength and the timing. A shift from short-term to long-term orientation within an environment of economic slowdown is the more probable,

- the faster the economic slowdown, in other words: the more intense pathological learning (arrows no. 1 through 4);
- the better educated and the more equipped to process incoming information about economic relations the public, in other words: the higher the pressure the public can exert on vested interests and the government (arrows no. 9 and 10);
- the more competition on the market for information exists, in other words: the more likely it is that the government will be reached by new information not in accordance with its preferences; then the shift and refinement effect are relatively small (arrow no. 7).
- the better the country is integrated into the world economy; then both the pressure from the world market as well as the foreign support to pursue reforms increases (arrow no. 5);
- whether political competition encourages reform, is not to decide theoretically.

In a second step, we analyse the relative importance of active versus pathological learning. Although it is crucial to know more about the speed of the process, it is highly desirable from a normative perspective to know how to implement reforms without significant pathological learning. The factors affecting the speed of course also influence the relative strength of both ways of learning. To start with integration of the country into the world economy, it seems plausible that it has a positive impact on the society's ability to learn

actively. Better examples and explicit information by foreign agencies and governments may decrease the importance of the shift and refinement effect. Second, there may be a self-reinforcing effect with respect to rules. If rule bound policy – e.g. in monetary and competition policy – has a long tradition in the country, the speed of active learning in other policy areas increases. If not, the process of pathological learning may be stronger – implying that the reform will be pursued later. Third, a good average education level in the public about economic relationships may foster active learning in politics, the level of education is better with a free press and independent universities and research facilities. However, the level of economic education may reflect the usage of rule bound policy. There may be another self-reinforcing element in the process. To summarise, it seems plausible that the relative strength of active learning increases with the level of knowledge already accrued in society. Additionally, the degree and speed of the implementation of new ideas is dependent from the institutional surrounding in the country. For example, complex federal systems like in Germany need active learning on many levels of institutions, as otherwise implementing a new policy is not possible.

IV. Conclusion

The paper has analysed the relative importance of two divergent feedback processes in economic policymaking and their effects on the implementation of policy rules as remedy for the negative impacts of discretionary policy on the economic performance of a country. The central message is that any policy reform takes place at the end of such an evolutionary process with active and pathological learning.

Empirical evidence of economic policy reform in history is rich and covers wide areas of policymaking. To finish this paper and to give an idea for further research, we take a look at monetary policy in younger history. Monetary policy in the world used to be characterised by discretion throughout the first 30 years after WWII, with a few exceptions. Since the early 1980s, there is a growing concern for independent central banks. We can observe both active and pathological learning as well as foreign support to transform this concern in real policy.

To start with pathological learning, there is overwhelming evidence that all cases of hyper inflation are caused by excessive budget deficits. Governments were unable to control their public spending and started to monetise the budget deficits (Fischer, Sahay and Vegh 2002). In many of these cases, only after a period of high and costly inflation, a successful monetary reform with the introduction of policy rules – either via central bank independence or via currency board or similar arrangements – was pursued¹⁹.

Many of these reforms were accompanied by foreign support. The IMF, the European Union or single countries exerted formal pressure or gave formal support to introduce the rule. Examples are a number of monetary reforms in Latin America or the introduction of central bank independence in accession candidates to the EMU, let alone the founding members of the EMU, e.g. France, Italy and Spain.

These countries indeed form a group of countries where we could observe active learning. During the existence of the EMS, these countries were more or less forced by the Bundesbank to adopt a monetary policy directed at price stability. This has certainly taught policymakers and the public that inflation is not costless. As a parallel process, the Phillips-trade-off lost its academic credential; new empirical evidence about the relation between unemployment and inflation diffused and changed the existing knowledge (and probably also preferences) of policymakers and private agents.

So, we can observe all processes taking place parallelly, albeit with different speed in different countries. Future research should be dedicated to the question of what exactly distinguishes countries with a high share of pathological learning from those with a high degree of active learning.

References

Barro, Robert J. and David B. Gordon (1983), 'Rules, Discretion and Reputation in a Model of Monetary Policy', in: *Journal of Monetary Economics*, 12, 101-121.

¹⁹ For a comprehensive analysis see Freytag (2002).

- Becker, Gary S. (1983), 'A Theory of Competition Among Pressure Groups for Political Influence', *Quarterly Journal of Economics*, Vol. 98, pp. 371-400.
- Becker, Gary S. (1985), 'Public Policies, Pressure Groups and Dead Weight Costs', *Journal of Public Economics*, Vol. 28, pp. 329-347.
- Berger, Helge, Jakob de Haan and Sylvester C. W. Eijffinger (2001), 'Central Bank Independence: an Update of Theory and Evidence', in: *Journal of Economic Surveys*, 15, 1, 3-40.
- Blackburn, Keith and Michael Christensen (1989), 'Monetary Policy and Policy Credibility: Theories and Evidence', in: *Journal of Economic Literature*, 27, March, 1-45.
- Brennan, H. Geoffrey and James M. Buchanan (1981), *Monopoly in Money and Inflation*, London: Institute for Economic Affairs.
- De Haan, Jakob, Erik Leertouwer, Erik Meijer and Tom Wansbeek (2003), 'Measuring Central Bank Independence: A Latent Approach', in: *Scottish Journal of Political Economy*, 50, 3, 326-340.
- Donges, Juergen B. and Andreas Freytag (eds.) (1998), *Die Rolle des Staates in einer globalisierten Wirtschaft*, Stuttgart: Lucius & Lucius.
- Fischer, Stanley, Ratna Sahay and Carlos Vegh (2002), 'Modern Hyper- and High Inflation', *Journal of Economic Literature*, Vol. XL, pp. 837-880.
- Freytag, Andreas (1995), 'The European Market for Protectionism: New Competitors and New Products', L.Gerken (ed.) *Competition among Institutions*, London and Basingstoke: Macmillan, 231-58.
- Freytag, Andreas (2002), *Success and Failure in Monetary Reform. Monetary Commitment and the Role of Institutions*, Edward Elgar, Cheltenham, Northampton.
- Kydland, Finn E. and Edward C. Prescott (1977), 'Rules Rather than Discretion: The Inconsistency of Optimal Plans', in: *Journal of Political Economy*, 85, 3, 473-491.
- Mauro, Paolo (1998), 'Corruption: Causes, Consequences, and Agenda for Further Research', *Finance and Development*, March, pp. 11-14.
- Meier, Alfred and Klaus Durrer (1992), 'Ein kognitiv-evolutionäres Modell des wirtschaftspolitischen Prozesses', Ulrich Witt (ed.), *Studien zur Evolutorischen Ökonomik II*, Berlin: Duncker & Humblodt, 229-254.
- Nordhaus, William D. (1975), 'The Political Business Cycle', in: *Review of Economic Studies*, 42, 169-190.
- Nordhaus, William D. (1989), 'Alternative Approaches to the Political Business Cycle', *Brookings Papers on Economic Activity*, 2, 1-49 and 66-68.
- Olson, Mancur (1965), *The Logic of Collective Action*, Cambridge/Mass. and London.
- Olson, Mancur (1982), *The Rise and Decline of Nations*, New Haven and London.

- Paldam, Martin (2002), 'The Cross-Country Pattern of Corruption: Economics, Culture and the Seesaw Dynamics' *European Journal of Political Economy*, 18, 215-240.
- Persson, Torsten (1988), 'Credibility of Macroeconomic Policy: An Introduction and a Broad Survey', in: *European Economic Review*, 32, 519-532.
- Rogoff, Kenneth and Anne Sibert (1988), 'Elections and Macroeconomic Business Cycles', *Review of Economic Studies*, LV, 1-16.
- Rose-Ackermann, Susan (1999), *Corruption and Government – Causes, Consequences, and Reform*, Cambridge: Cambridge University Press.
- Saade, Radwan (2002), 'Rules versus Discretion in Tax Policy', Small Business Research Working Papers 02rs.
- Schneider, Friedrich and Dominik H. Enste (2000), 'Shadow Economies: Size, Causes and Consequences', *Journal of Economic Literature*, Vol. 38, pp. 77-114.
- Tanzi, Vito and Hamid Davoodi (1997), *Corruption, Public Investment and Growth*, IMF Working Paper, 97/139, Washington D.C.: IMF.
- Tullock, Gordon (1965), 'Entry Barriers in Politics', *American Economic Review*, 55, pp. 458-466.
- Vaubel, Roland (1991), 'A Public Choice View of International Organization', in: Roland Vaubel and Thomas D. Willett (eds.) *The Political Economy of International Organizations: A Public Choice Approach*, Westview Press, Boulder, San Francisco and Oxford, pp. 27-45.
- Witt, Ulrich (1992), 'The Endogenous Public Choice Theorist', *Public Choice*, 25, 117-129.
- Witt, Ulrich (1996), *The Political Economy of Mass Media Societies*, Papers on Economics and Evolution # 9601, Jena: MPIEW.
- Witt, Ulrich (2003), 'Economic Policy Making in Evolutionary Perspective', *Journal of Evolutionary Economics*, 13, 77-94.
- Wohlgemuth, Michael (2000), 'Political Entrepreneurship and Bidding for Political Monopoly', *Journal of Evolutionary Economics*, 10, 273-296.

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