



POLITICAL INSTITUTIONS AND PRIVATISATION POLICY

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Privatisation is a landmark economic policy of the last two decades. This massive transfer of ownership initiated in the United Kingdom gained momentum thanks to the large scale programs implemented in Asia and Europe in the mid-1980s and early 1990s. In the mid-1990s, privatisation became the cornerstone policy in the transition from central planning to a (fledgling) market economy in several post-communist countries. Throughout the period, international lending agencies strongly endorsed privatisation in their recommendations and conditionality in developing countries. State sell-offs culminated in 1998 when sales in public and private equity markets brought to governments' coffers more than \$100 billion of revenues.

Explaining privatisation cycles

At the turn of the century privatisation programs abruptly slowed down. With only \$50 billion raised on average, the 2001–03 period marked the end of the big cycle of the 1990s (Figure 1).

During this cycle, financial assets worth \$1.26 trillion have been transferred from the state to the private sector. This sustained privatisation policy caused a substantial contraction in the share of value added produced by state-owned enterprises (SOE), spurring the efficiency of privatized firms and changing dramatically the financial landscape in developed and developing na-

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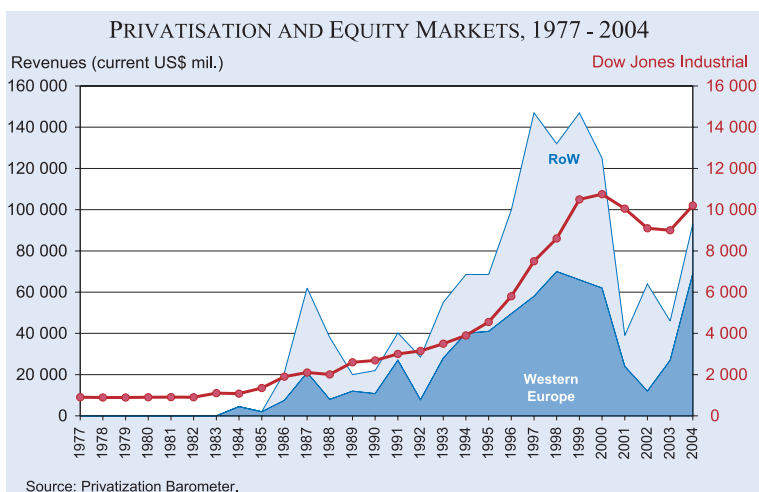
tions. These facts beg some important questions: Is privatisation a one-off policy of the 1990s, or a cyclical phenomenon? If so, what drives privatisation cycles?

Indeed, the massive transfer of ownership of the 1990s may have exhausted the SOE sector. Governments may have no more property left to sell or may own less-performing assets for which it is more difficult to find buyers. Even if there is some room to apply the law of decreasing returns in the context of privatisation, this effect does not seem to explain the end of privatisation. Indeed, government ownership is still pervasive, the state being a major shareholder even in privatized firms.

Clearly, after a decade of state sell-offs, the form of state ownership in firms has changed considerably. Direct stakes owned by ministries have sometimes been replaced by indirect stakes in privatized spin-offs from large public holding companies. Elsewhere, pyramiding occurred and shareholdings have been transferred to financial institutions with private shareholders, but under public control (i.e. KfW in Germany, Cassa Depositi e Prestiti in Italy, Caisse des Dépôt et Consignations in France, or other agencies).

But when ultimate ownership and pyramiding is fully taken into account, we find that governments are still in business and own large chunks of the

Figure 1



largest and often more profitable domestic companies. To provide a rough figure, as of 2000 governments are the largest (ultimate) owner of about one third of privatized companies in OECD economies, and this share increases considerably in strategic sectors such as energy, transports, and utilities (Bortolotti and Faccio 2004). The same snapshot taken in 1996 shows that the large scale privatisations of the late 1990s did not alter dramatically ownership structures. Indeed, in this year we find a close share (34 percent) of government controlled firms.

Even if we limit our view to direct holdings in privatized (listed) companies, a conservative estimate for the governments' retained stake market valuation is \$800 billion (Privatisation Barometer 2005). Indeed, the sheer size of the residual SOE sector suggests that supply effects are not responsible for the slowdown in privatisation.

The real explanations for this stylized fact are found in the empirical literature on the determinants of privatisation. Panel data analysis – and common sense – suggest that market conditions are the main drivers of state sell-offs. Issuers, both private and public, are reluctant to sell shares in depressed markets. And this is the reason why we observe a co-movement in privatisation and other financial phenomena, such as M&A (Bortolotti, Fantini, Siniscalco 2003).

From 2000 to end 2002, stock markets experienced one of the most acute crises in recent financial history. The Dow Jones Industrial fell by 35 percent and volatility measured by the VIX index raised from 24 percent to 55 percent in August 2002. The bad outlook in equity markets halted privatisation sales. In the same period, global revenues fell by 46.9 percent (61.6 percent in Europe), bringing back privatisation activity to the levels observed in the mid-1980s, when only one country – the UK – was seriously engaged in divestiture.

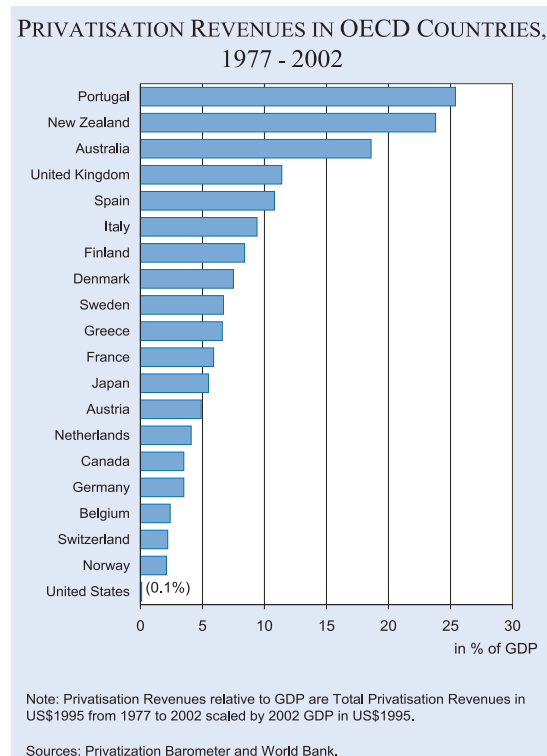
From 2003, the global economy started slowly to recover. Higher economic growth, pushed by low inflation and interest rates, contributed to a steady increase in market capitalisation. This trend of equity markets consolidated in 2004. Not surprisingly, with the bear market finally put to rest, privatisation activity resumed with a vengeance (Figure 1). Europe (including new accession countries) had the lion's share of activity in year 2004.

Overall, European governments implemented 80 privatisations worth \$69 billion. Interestingly, the last year marks the comeback of IPOs and global offerings earmarked to the retail investors.

Privatisation is therefore a cyclical phenomenon, largely following stock market swings, with waves of state sell-offs associated with hot markets. However, the empirical literature has shown that privatisation is not simply market-driven, but also strongly affected by governments' budget constraints and public finance conditions. Governments in financial distress tend to design privatisations in order to maximize the fiscal impact of divestiture, which could affect the debt ratio but also indirectly budget deficits via a reduction of interest payments and an increase of tax revenues. This argument – in combination with the improved outlook in equity markets – explains the resumption of the process especially in the European Union, where governments facing sluggish growth rates are trying hard to meet Maastricht criteria.

Common factors seem to affect then the cyclical behaviour of privatisation. Yet the extent of privatisation varies greatly across countries, and a large part of its variability remains unexplained also when we control for the initial size of the State-owned enterprise and for the level of economic development. Indeed, stark differences emerge

Figure 2



also within OECD economies where we find deep a privatizing country such as New Zealand (with privatized assets worth more than 20 percent of GDP over two decades) together with countries like Switzerland or the United States which almost never privatized at all (Figure 2).

We claim that a political economic approach could be useful in understanding one country's ability of implementing policy with important distributional consequences, such as privatisation. Particularly, political institutions, i.e. the set of constitutional rules governing the functioning of political systems, should matter in explaining the extent of privatisation across countries and overtime.

The role of political institutions: theory

The theoretical underpinnings of our claim can be found in some contributions on the political economy of stabilisation policies. One of the main contribution on this topic is Alesina and Drazen (1991). Indeed, privatisation is often a key policy of a fiscal stabilisation package so their model can be suitably adapted to our context. The assumptions are that the benefits of privatisation accrue to all citizens and stem from abandoning a highly distortionary method of financing the SOE sector. However, the costs of privatisation are apportioned differently among interest groups, with one group bearing a disproportionate fraction of the social cost of privatisation (typically workers). Under these assumptions, the process leading to privatisation becomes a "war of attrition" between groups, characterized by political stalemate until one group concedes. Concession occurs at equilibrium when the group-specific cost of waiting equals the expected benefit from waiting. Importantly, the model shows that countries characterized by political cohesion (i.e. where stabilisation/privatisation costs are distributed more equally between "winners" and "losers") privatize sooner. If one country's political system favours the formation of large coalitional cabinets, the interest group of "losers" from privatisation has a voice in the political arena, and engages in a "war of attrition" which delays the efficient policy change.

Standard models of electoral competition with opportunistic politicians provide also explanations about the role of political institutions in privatisation. Persson and Tabellini (2000) contrast majoritarian and proportional systems to show how the electoral rule affects policy outcomes and rent-seeking behaviour. Particularly, majoritarian elections foster competition for votes in marginal districts, where the most mobile voters are concentrated; in turn, enhanced electoral competition reduces rents for politicians.

These models have been developed to study explicitly the size of government and the distribution of public expenditure in terms of public good provision and targeted redistribution. However, the rent-seeking behaviour by politicians induced by different electoral rules has important implications also in terms of privatisation policy. It has been largely documented that state-owned enterprises are an important source of political rent for elected politicians, who can interfere in the operating activity of the company in order to cater specific interest groups. First, they can maintain the political support from employees by forcing the managers of state-owned enterprises to keep redundant workers and high wages (Shleifer and Vishny 1994). Second, they can extract outright rents in the form of corruption or enjoy other private benefits of control (Dyck and Zingales 2002). Majoritarian elections (and stiffer electoral competition) should keep politicians "on their toes", mitigating rent seeking behaviour and moral hazard problems arising from the political control of state-owned firms. *Ceteris paribus*, politicians should be less reluctant to privatize in countries with majoritarian electoral rules, as the equilibrium level of rents they can extract via political interference in state-owned firms is lower.

A political economy approach has been recently applied also in the finance literature to explain the degree of investor protection. Pagano and Volpin (2004) develop a model where the relevant stakeholders in society are entrepreneurs, minority shareholders and workers. In this setting, there exist a "corporatist" political equilibrium between entrepreneurs and workers where low investor protection is traded for high employee protection. The former allows entrepreneurs to enjoy freely large benefits of control, while the latter allows low productivity workers to extract rents in the form of severance pay. By striking this political agreement, both classes preserve their rents at the expense of minority investors. This agreement is more feasible in "corporatist" countries, i.e. where the political system favours the formation of large coalitional governments with the participation of diverse interest

groups. This result may also hold in a model where the entrepreneurs are the managers of public firms and the policy choice is privatisation vs state ownership of firms. Minority investors would prefer state-owned enterprises to be privately owned as they could obtain a fraction of the efficiency gains from privatisation. But bureaucrats strike a political agreement with workers trading public ownership for employee protection. A corporatist agreement may also emerge in this context, where bureaucrats protect the rents associated with political interference in state-owned firms and workers obtain wages above their marginal productivity.

The political economy models suggest that majoritarian political systems, as opposed to “consensual-corporatist” democracies, should be more likely to privatize, and should be associated with a more intense privatisation effort. But what do the data say? In order to answer this question, objective quantitative indicators about the functioning of political systems are needed.

Measuring political institutions: the FEEM DPI

Comparative political science is very helpful in identifying the right dimensions through which political systems can be evaluated and (possibly) measured. Lijphart (1999) provides a classification of political-institutional systems based on two benchmark models, majoritarian and consensus. Both systems acknowledge the right of the majority to take decisions that bind all other citizens. However, whereas the majoritarian model relies upon the bare majority, the consensus model tries to broaden its size by dispersing decision-making power both within and between different institutional bodies, and by increasing the number of veto players, i.e. political agents enjoying veto power.

The majoritarian model is characterized by an extreme predominance accorded to majority will in winner-takes-all systems, which in turn favours government stability; in contrast in consensual models, stability is traded for the protection of minority rights. The balancing between majority and minority rights entails a trade-off between government stability and representativeness, which in turn affects political outcomes.

Stability in majoritarian systems is achieved by the means of institutions such as electoral thresholds,

which aim at reducing the number and political power of veto players. On the other side, consensus models foster representation and even over-representation of minor parties and constituencies, increasing in this way the number of veto players and the political fractionalisation. The convergence to either one model or the other polar model is achieved by the body of laws, rules and customs that shape the power accorded to minorities while aggregating political preferences. Within modern democracies, such an aggregation takes place mainly by legislative election and cabinet formation. Thus, the “political technologies” which transform electoral votes into parliamentary seats and these, in turn, into executive power, are key factors.

Comparative political scientists claim that the main dimensions to look at when one wishes to locate different political systems along the “majoritarian-consensus” spectrum are: the electoral rule, and particularly the power it affords to minorities, the party structure and the type of executive.

The literature makes these notions operational by developing three measures. The first is the *disproportionality index* (DISPR) which takes into account the divergence between parties’ votes distribution and seats distribution implied by different electoral rules. Such divergence mainly consists of overrepresentation of major parties and partial or complete exclusion of minor ones. The second is the *effective number of parties* (ENP), which parallels the Herfindal concentration index commonly used in industrial economics, by giving more weight to those parties holding higher “coalition potential”, i.e. substantial bargaining power in terms of seats. The third one is the *type of cabinet* (TOC) which classifies the executives in term of different degrees of stability. The minimal winning (including only parties whose support is necessary to achieve parliamentary majority) one party cabinet (MWOP) obtains the maximum score, while minority or oversized coalition governments get lower scores.¹ Higher values of DISPR and TOC and lower values of ENP are associated with a political system closer to the majoritarian model.

Although the three measures refer to a specific feature of the political institutional setting they are strongly interrelated and maybe jointly determined.

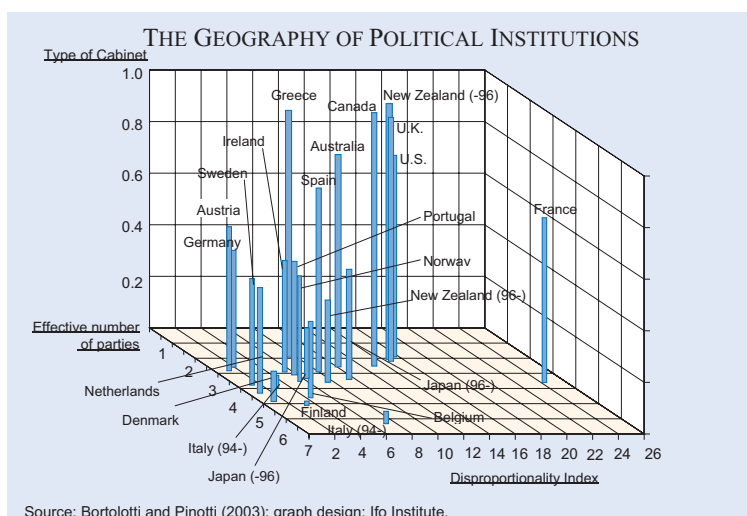
¹ For a more accurate definition of these indexes and sources see Bortolotti and Pinotti (2003).

Indeed, one might argue that electoral rules affect the ENP and this in turn determines the type of coalition formed. For this reason, the three indexes are usually considered as complements, rather than as substitutes. Therefore, following Lijphart (1999) we also standardize the three indexes on the whole sample and then compute their mean, which yields the POLINST variable.²

The FEEM Database of Political Institutions (FDPI) contains the political indexes described above that we have computed for 21 OECD economies from 1997 to 2002, updating and cross-checking the data originally compiled by Lijphart using electoral data. An important feature of these political variables is that they are time varying, as they change around election years in a given country and around institutional reforms, allowing the use of panel data estimation techniques.

² Obviously, the sign of the ENP has been reversed as a *higher* effective number of parties fits with the consensus model.

Figure 3



The table shows the mean values for the disproportionality index, the effective number of parties, type of executive, and the POLINST variable for the countries of our sample. Three countries implemented institutional reforms in our sample period: Italy modified its electoral system in 1992, New Zealand and Japan in 1993. The two means presented for these countries are computed on the two sub-periods, before and after the first post-reform election. Figure 3 plots the same cross-country means on a three-dimensional graph.

Political and privatisation data

Countries	Dis-proportionality index DISPR	Effective number of parties ENP	Type of cabinet TOC	POLINST	Total privatisation revenues/GDP
Australia	10.829	2.425	0.816	0.864	0.186
Austria	1.614	2.779	0.548	-0.109	0.049
Belgium	3.699	4.623	0.298	-0.847	0.024
Canada	13.641	2.343	0.985	1.248	0.035
Denmark	1.492	4.885	0.123	-1.258	0.075
Finland	3.347	5.109	0.017	-1.332	0.084
France	24.390	3.350	0.633	1.203	0.059
Germany	2.094	2.652	0.462	-0.133	0.035
Greece	7.729	2.231	0.973	0.906	0.066
Ireland	4.264	2.869	0.437	-0.096	0.072
Italy (-94)	3.505	3.955	0.048	-0.916	0.008
Italy (94-)	7.105	6.390	0.042	-1.486	0.086
Japan (-96)	6.087	2.990	0.184	-0.297	0.044
Japan (96-)	8.801	3.145	0.431	0.088	0.011
New Zealand (-96)	14.858	1.965	1.000	1.461	0.187
New Zealand (96-)	7.419	3.404	0.326	-0.194	0.051
Norway	4.483	3.680	0.413	-0.369	0.021
Portugal	4.536	3.010	0.445	-0.116	0.254
Spain	7.851	2.733	0.712	0.468	0.108
Sweden	1.829	3.642	0.412	-0.523	0.067
Switzerland	3.059	5.578	0.000	-1.519	0.022
The Netherlands	1.308	4.282	0.390	-0.785	0.041
United Kingdom	14.852	2.174	0.953	1.343	0.114
United States	15.699	1.936	0.789	1.293	0.001
Means	7.270	3.423	0.477	-0.046	0.118

Source: Bortolotti and Pinotti (2003).

Majoritarian electoral rules, which are associated with greater disproportionality, allow fewer parties to gain seats in the parliament; in turn, a lower number of parties is associated with a higher probability of observing MWOP ruling coalitions. This “pattern of democracy” is well represented in Figure 3 by the cluster including the five Anglo-Saxon countries: Australia, Canada, United Kingdom, United States and New Zealand (before 1993). At the opposite, proportional electoral institutions produce fragmented parliaments and government coalitions. Proportional countries comprise the Low Countries (Belgium and Netherlands), the Scandinavian Countries (Denmark, Finland, Norway and Sweden), Italy and, finally, Switzerland, which is cer-

tainly the most consensual country of our sample. Southern European countries (Greece, Portugal and Spain), the German-speaking countries (Germany and Austria), Japan (the only Asian country in the sample) and Ireland (the exception among the Anglo-Saxon countries) occupy half-way positions. Geographic proximity may have played a role in determining these clusters, as political and commercial spheres of influence may also have shaped historically political institutions.

As we already mentioned, three cases of electoral systems' reform are reported. Since they are rare events (3 out of 483 country-years in our sample), it may be interesting to evaluate their impact on our political indicators. In New Zealand, the 1993 reform from majoritarian to proportional electoral system resulted in an increased number of parties and in a decreased index for the government coalition. Japan and Italy, attempting to curb corruption and improve government stability, moved instead in the opposite direction, shifting from proportional to majoritarian systems. However, these reforms did not pay off as expected. In Japan, the government coalition index increased, but the number of parties increased as well, even if only slightly. Italy even faced a sharp increase in the number of parties (in the first graph, Italy moves perpendicularly to the regression line), leaving unaffected the mean score for the government coalition index. These last findings suggest that in order to get an adequate characterisation of complexity of the political-institutional systems, it is particularly useful to construct aggregate measures taking into account the various dimensions of political decision making.

Empirical results

We have performed multiple analyses in order to test the effect of political institutions on privatisation policy. In what follows we will briefly describe the main evidence that we provide. The interested reader may refer to Bortolotti and Pinotti (2003) for a complete presentation of the empirical results.

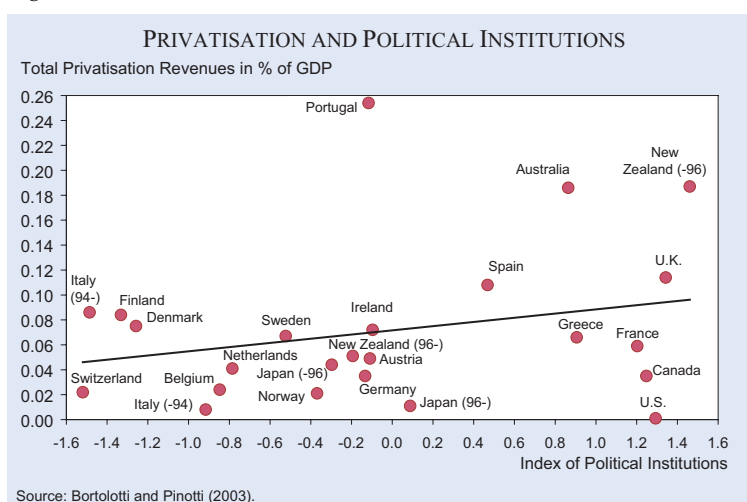
We start by looking at Figure 4, which plots the average values of our aggregate index POLINST

and the total privatisation revenues raised in the country (in constant dollars) to GDP. The positive slope of the regression line suggests that privatisation activity may be correlated with political institutions. Indeed, we find strong privatizing countries such as the UK and New Zealand associated with higher values of our index. Conversely, a typical proportional country such as Switzerland lies very close to the origin. Nevertheless we find also several outliers, such as Portugal and importantly the US.

Univariate analysis allows us to corroborate these preliminary findings. We find a strongly statistically significant difference of 0.25 between the average value of the (standardized) POLINST index in country-years when a large-scale privatisation occurred, and the same average when it did not occur. The likelihood of privatisation seems therefore affected by the presence of majoritarian political institutions. Among the individual components, the disproportionality of the electoral rule appears to drive up the significance, immediately followed by the type of cabinet indicator. A quite similar picture emerges by looking at revenues. We find a strongly statistically significant difference between the average values of DISPR in the top and bottom quartile of the distribution of revenues to GDP.

These preliminary findings suggest that our political institutional variables may have explanatory power. We therefore performed a set of econometric regressions estimating the timing, the likelihood and the extent of privatisation in a panel data setting, including our institutional measures as regressors. A first important result is that political fragmentation within the executive (measured by the TOC) seem to explain why privatisations are de-

Figure 4



layed. The time elapsing from the first privatisation in our sample (British Petroleum in 1977) to the year corresponding to the median value of revenues to GDP for a given country is longer the stronger the presence of veto players within the government. The same variable affects significantly also the probability of observing a privatisation in a given year. Finally, we find the disproportionality index strongly affecting privatisation activity measured by the revenues in tobit regressions. Similar results are obtained when we estimate the coefficients of the aggregate index. Results are robust to the inclusion of different control variables and do not appear to be affected by simultaneity bias.

This bulk of econometric evidence allows us to conclude that political institutions matter in privatisation policy: as predicted by the theory, majoritarian countries privatize more than proportional/consensual democracies.

Conclusions

Our analysis shows that political institutions are an important determinant of privatisation policy. However, our conclusion does not imply any judgment of value on different patterns of democracy. Each model has advantages and disadvantages. Majoritarian political institutions streamline policy implementation and structural reforms by reducing the impact of minorities on the decision-making process. Conversely, a more consensual system favours representation and pluralism to smooth political and social tensions while creating stalemate in economic policy. Both systems have proved themselves to be valuable and equally compatible with solid democracies and with the most developed nations of the world.

The main point that we highlight in this note is the existence of a trade-off in the choice of a given constitutional setting. In some cases, this dilemma vanishes. Deeply divided societies (by language, religion, race, or ideology) will badly fit in with a purely majoritarian system, and it is likely that the introduction of such a model would generate further division and social conflicts. Indeed, social polarisation represents a formidable hurdle to carry out experiments in constitutional engineering. But in the more numerous intermediate cases, the costs of highly consensual systems should be carefully

gauged, especially where deep structural reforms (including privatisations) are badly needed.

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