OWNERSHIP
AN INAUGURAL LECTURE

Colin Mayer

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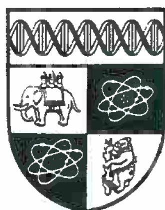

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UNIVERSITY OF WARWICK
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OWNERSHIP
AN INAUGURAL LECTURE

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Colin Mayer

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ABSTRACT

There are pronounced differences in patterns of corporate ownership across countries. The most striking concerns concentration: the degree of concentration of ownership is markedly higher in France and Germany than it is in the UK. Large sharestakes in France and Germany are frequently held by other companies and families. Concentration of ownership affects the form of corporate control: market processes are associated with dispersed shareownership and direct investor control with concentrated ownership. The paper suggests that there is a tradeoff between the anonymity of market processes and the commitment that concentrated ownership permits. More effective internal forms of corporate control have emerged in France and Germany which have obviated the need for market processes. However, the anonymity of the market may be a more effective method of correcting industry wide failure. Recent developments in Eastern Europe are interpreted in this context and an explanation is offered for the emergence of different systems in the West.

Keywords: Ownership, concentration, corporate control, financial systems

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CONTENTS

1. Introduction

2. Aggregate Patterns of Ownership in France, Germany and the UK

3. The Literature on Ownership

4. Evidence from Individual Firm Data

5. A Theory of Ownership

6. Lessons from Eastern Europe

7. The Emergence of Financial Systems in the West

8. Implications for Economic Theory and Policy

1. Introduction

God has blessed us with two eyes, two ears, two arms and two minds. It is therefore perhaps not suprising that to many, economics is a choice between two systems: socialism and capitalism. Such has been our preoccupation with this choice that it has relegated any other consideration to secondary importance. In particular, it has deflected us from seeing what is perhaps a much richer source of variation within our own system. One of the possible unexpected benefits of the demise of socialism may be that it allows us to appreciate the polymorphous nature of capitalism. That is the theme of what I will be talking about today.

I will describe some of the insights that I believe that ownership offers into the operation of an economy. I will begin by describing aggregate patterns of ownership in France, Germany and the UK. I will then consider what economics has to say about the significance of these. I will examine whether the theories stand up against more detailed analysis of individual firm data. On the basis of this I will offer an alternative theory of ownership.

One region in which questions of ownership are of particular relevance is Eastern Europe. Different countries are pursuing quite different ways of privatizing their industries. I will describe how the debate in Eastern Europe about alternative forms of ownership mirrors the theoretical analysis.

One of the puzzles that will reemerge continuously throughout this paper is why such diverse forms of ownership should co-exist. I will argue that in a western context, patterns of ownership reflect different requirements for corporate control. The structure of corporations in some countries necessitates forms of corporate control that are quite distinct from those in others.

Finally, I will attempt to draw some implications of this analysis for both economic theory and economic policy.

Before I begin I should say that this talk is based on work that I have done with a number of other people over an extended period of time. In particular, it draws on research that I have been undertaking with Professor Julian Franks at the London Business School. In

addition, we have drawn on the assistance of several researchers two of whom are here at Warwick: Luis Correia da Silva and Marc Goergen.

2. Patterns of Ownership in France, Germany and the UK

Reared in the UK, one tends to have some stereotype ideas of the structure of ownership. Put at its most simple, that description would run along the following lines: there are small companies that are privately owned by individuals, families and partners. There are large companies which are quoted on the stock market and owned by a large number of individual shareholders. However, institutions, in particular pension funds, life assurance firms and mutual funds, also own a significant fraction of the shares of companies.

The evidence from this comes from looking at ownership patterns of UK firms. Of the top 700 companies in the UK, nearly 80% of them are quoted on the stock market. In total, there are over two thousand companies quoted on the stock market in the UK, in comparison with an extant population of around half a million. The value of companies quoted on the stock market is around 81% of GDP and around two-thirds of equity of quoted companies is held by institutions.

However, this pattern is by no means universally observed. On the contrary it is the exception rather than the rule. While the US has more quoted companies than the UK, the value of these as a proportion of GDP is somewhat less than it is in the UK. But in most other countries, the number of quoted companies is far fewer than the 2,000 in the UK (Graph 1). In Germany, there are less than 700 quoted companies and in France there are fewer than 500. In both countries, the value of quoted companies accounts for around just one quarter of GDP (Graph 2). Quoted companies account for a much smaller fraction of corporate activity in most countries outside the UK and US.

This in itself is of some interest. Why should stock markets be so much more significant in some countries than others? If we believe, as many have argued, that stock markets are an

important part of financial development, it is surprising to observe their limited scope in some countries.

But there is a still more interesting observation. Much has been said about the difference between ownership of equity in the UK and US. The US has a far higher proportion of equity owned directly by individuals than the UK where, as I noted, most is held by institutions. At the same time as the UK government has been attempting, and singularly failing, to encourage more personal equity holding by individuals through its wider share ownership plans, the proportion of equity held by institutions in the US has been increasing rapidly. I am unconvinced that the distinction between direct holdings of equity by individuals and indirect holdings of equity by pension funds and life assurance firms on behalf of individuals is of great significance. Some believe that individuals are more likely to take long-term views of companies than institutions but I remain quite sceptical. In any event, there is a much more relevant distinction across countries in ownership patterns.

In France, Germany and Japan by far the single largest group of shareholders is the corporate sector itself. Companies own shares in each other. For those of us reared on the notion that companies are there to serve to their shareholders, the idea that the dominant shareholders could be the companies themselves raises deep suspicions. It is as if the economics profession existed primarily to provide entertainment to itself and little of value to the rest of society - a proposition that you can all agree is preposterous.

But that is by no means the end of the matter because not only does the nature of the owner differ across countries but so too does the nature of that ownership. In the UK and the US, ownership is dispersed across a large number of institutions or individuals. In the UK, most equity is held by institutions but no one institution owns very much of any one company. In the US, most equity is held directly by a large number of individuals.

As this slide (Graph 3) illustrates, in other countries ownership is concentrated. This slide shows the ownership patterns of approximately the largest 170 quoted companies in France, Germany and the UK. It records the percentage of companies in which there was at least one shareholder who owned more than 25% of the equity of a firm. There is a stunning

difference. In the UK, in just 16% of companies was there a single shareholder owning more than 25% of shares in any one company. In contrast, in Germany in nearly 85% of companies there was at least one shareholder owning more than 25% of the shares in any one company. In France, in nearly 80% of companies there was at least one shareholder holding more than 25% of shares. Concentration of ownership is much greater outside the UK and US.

Put these observations together: in Germany and France, the corporate sector is the main owner of equity in aggregate and concentration of ownership is far higher than in the UK and US. The implication of this would seem to be that in Germany and France, companies frequently have dominant shareholdings in each other. It is as if the economics profession not only existed to provide entertainment to itself but it was solely answerable to itself; on reflection perhaps not a bad description of the actual state of affairs.

This slide (Graph 4) provides confirmation of that suspicion for Germany. It breaks down large share stakes by different groups of investors: banks, investment institutions, companies, government etc. It reveals that a majority of the large share stakes are held by companies. The next largest group is families, followed by trusts, institutional investors and foreign companies. Quite interestingly, banks come rather far down the list of large stakeholders in Germany. I say interestingly because there is a commonly held view that banks control corporate Germany. At first sight this slide only provides limited support for that proposition. However, I will return to it shortly.

The following slides look at the pattern of ownership of German firms in more detail. Trusts and institutional investors were large stakeholders in the previous graph and this slide confirms that (Graph 5). However, their share stakes are rarely majority holdings. The same holds for banks: there are some large share stakes but rarely majority holdings (Graph 6). Contrast that with families. In one-third of cases, families appear from this slide to be majority holders of German industry (Graph 7). You should remember that these are the largest German companies. So, in contrast to the stylized description that I presented at the beginning, large-scale family ownership is a particular feature of the largest enterprises in

Germany. This will raise a fascinating question of how and why do German families hold onto equity so much longer than their UK counterparts.

The other group that emerges as having majority shareholdings is other companies (Graph 8). Not only do they have many and large stakeholdings, these shareholdings are often majority ones. The interest in this comes from the fact that these are all quoted companies, not just subsidiaries of other companies.

So just to summarize what we have learnt to date, firstly, while banks do have quite large share stakes they are rarely majority shareholders. The pattern for insurance companies, trust and institutional investors is very similar: some large but rarely majority shareholdings. Instead, there are two groups of dominant investors in Germany: families and companies.

A remarkably similar pattern emerges for France. Firstly, you will recall that the proportion of large stakeholdings in total is about the same as in Germany. This slide (Graph 9) records that as in the case of Germany, a majority of these are associated with other companies. Foreign companies, families and banks are other large stakeholders.

As in the case of Germany, there are some large stakes held by insurance companies but these are rarely majority holdings (Graph 10). Banks have some large minority shareholdings, often in excess of 25% (Graph 11). However, it is families (Graph 12) and other companies that have the largest proportion of majority shareholdings (Graph 13).

There is one difference that these last two slides bring out between France and Germany and that is the comparative importance of the state in large companies (Graph 14 and 15). Share stakes by the state are more prevalent and tend to be larger in size in France than in Germany.

What is the significance of this pattern of ownership? One implication is that in terms of control, the significance of outside shareholders is even smaller than the small number of quoted companies in Germany would suggest. Even where companies are quoted on the stock market, in many cases control resides with other companies. That is why elsewhere I have

contrasted insider and outsider systems of corporate control (Graph 16). Insider systems are ones in which the corporate sector has controlling interests in itself and outsider investors, while able to participate in equity returns through the stock market, are not able to exert much control. In contrast, the UK and US are outsider systems of corporate control in which there few large, controlling shareholdings and these are rarely associated with the corporate sector itself.

Why are there such marked differences across countries in ownership patterns and do they matter? To attempt to answer these questions I will first consider what the existing economics literature has to say about them.

3. The Literature on Ownership

One of the surprising aspects of modern economic analysis is how little it has to say about ownership. Within a neoclassical model of economics, ownership only features rather peripherally. In particular, the Arrow-Debreu general equilibrium model, which is still the central paradigm of economics, has virtually nothing to say about ownership. That is because, within the context of complete markets and complete contract models of an economy, such as Arrow-Debreu, there is no room for ownership. Anything that ownership can achieve can be replicated by contracts.

Ownership is, of course, important in determining the distribution of wealth. However, economists are quite dismissive about the significance of distribution on the grounds that there are other instruments available, in particular taxation, for redistributing income and wealth. It is economic efficiency rather than distribution that matters.

However, there are several strands of economics that are potentially relevant. The first is the industrial economics literature on vertical relations. This was the subject of a recent inaugural lecture here by Professor Michael Waterson. Since he did such an eloquent job of surveying the literature I will have little to say about this. Basically, economists have sought to explain

why upstream and downstream firms should seek to own each other in terms of the externalities that may exist between the parties. Upstream firms will not always take full account of the interests of downstream firms in the prices that they charge and the way in which they treat their purchasers. Ownership may be required to internalize this externality in the absence of suitable contractual alternatives.

A second strand of literature argues that transaction costs may make transactions through markets more costly than internal activities within the firm. It may be very difficult or very costly to write the contracts that are necessary to undertake transactions between firms through the market place. Avoiding the type of "opportunistic" actions that are associated with principal-agent relations may be better done within the firm than through the market place. This literature therefore views the firm as being a "nexus of contracts" that replace the explicit contracts that exist elsewhere.

Recently a new strand of literature on ownership has begun to emerge. Six years ago I gave an inaugural lecture at City University at which I argued that financial economics had failed to take account of one crucial aspect of financial instruments and institutions and that is the pattern of control that they confer on different parties. I argued that a distinguishing feature of banks in different countres was the extent to which they were willing and able to be involved in the restructuring of firms.

Since then a small but rapidly expanding literature on the control aspects of finance has begun to emerge. Control theories of corporate finance are concerned with the way in which financial instruments affect the allocation of control between different parties. Formally, they differ from most "principal-agent" models in allowing for changing principals. Voting equity (ordinary shares) confer control on shareholders; non-voting equity (preference shares) do not have voting rights attached to them; debt finance falls somewhere in between. It leaves borrowers in control so long as they are not in default but transfers control to the bank or bondholder when default occurs.

These theories are of direct relevance to considerations of the control of enterprises. However, they have more to say about financial instruments (which was the subject of my

last inaugural lecture) than they do about ownership. There are really only a handful of papers that have thus far attempted to apply control theories to questions of ownership: two that are of relevance here are those by Grossman and Hart and by Hart and Moore.

What these papers are concerned with is the exposure of firms or individuals who are making sunk investments in a transaction. A sunk investment is one whose value cannot be fully recovered if a decision is subsequently made to withdraw from the transaction. For example, producers of motor car components may make investments that are specific to the motor car manufacturers to whom they are supplying. In that case, suppliers are vulnerable to exploitation by their trading counterpart. For example, knowing that their suppliers are unable to use their equipment elsewhere, motor car manufacturers may try subsequently to reduce the price of the components that they are purchasing. Appreciating that they are exposed in this way, suppliers may be unwilling to make investments in the first place that are specific to particular purchasers.

Similar considerations may apply to employees who make investments that are specific to the firms for which they work. Investment in training may be only of relevance to current and not to alternative employment. In that case, employees may underinvest in training where they do not believe that they can preserve the value of their investments and where they are exposed to opportunistic behaviour by their employers.

Ownership is then regarded as a way of encouraging specific investments. It allows parties to avoid decisions being taken in the future that adversely affect the value of their past investments. Hart and Moore therefore see ownership as being associated with complementarity in production between the assets of different firms and their employees. One would expect to see joint ownership where (i) it is difficult to use contracts to avoid expropriation of subsequent returns, (ii) there is strong complementarity between the assets of the two firms and (iii) where one of the assets or one of the owners of the assets is particularly important to the other party and should therefore become the owner of both the assets.

These theories suggest that we would expect patterns of ownership to reflect complementarities in production. So the next question that we should address is whether there is any evidence that this is indeed the case.

4. Evidence from Individual Firm Data

The next three slides show the pattern of ownership of three prominent German companies - Renk AG (Graph 17), Kromschroder AG (Graph 18) and Metallgesellschaft AG (Graph 19). They are all large in employing more than 500 employees and having a turnover of more than DM 50 mn per annum.

They reveal a number of points. Firstly, they show the equity holdings of corporates in each other. These investments are frequently in quoted companies and are often by firms in related or the same industry. This first slide (Graph 17) shows a large holding by MAN AG, a large German engineering company, producing buses, lorries and machines, in Renk AG another mechanical engineering company. Ruhrgas (Graph 18) is a gas company which owns Elster, another gas company.

Secondly, however, the other corporates are frequently not trading partners. The gas company, Elster holds Kromschroder, a precision mechanics and optics company. Thirdly, while initial holdings are often by other companies, if one goes further back in the family tree of these companies then banks and insurance companies emerge. Partnerships between Allianz and German banks are commonplace in large corporations. Allianz and Deutsche Bank between them have a controlling interest in the holding company of Metallgesellschaft (Graph 19). Allianz, Allianz's life insurance company and Commerzbank have a controlling interest in a holding company in MAN.

Fourthly, the significance of banks is greater than their direct equity holdings would suggest: as holders of bearer shares they are able to exercise proxy votes on behalf of widely held shares. By definition we are interested in the equity holdings of quoted companies, so that at least a portion of the shares are widely held. That portion is sometimes quite significant.

In these cases, banks are able to exercise the voting rights that are conferred upon them by virtue of their holdings of bearer shares on behalf of individual investors. Finally, the importance of foreign investors in Metallgesellschaft AG is evident. The Kuwait Investment Office is an important investor in many large German companies.

Ultimate owners in Germany are families, foreigners, banks, insurance companies or individual investors. The last group in general confers their power on banks through proxy votes. This pattern is replicated in France. This slide (Graph 20) of the French water company, Degremont, shows inter-corporate, family, bank, insurance company and financial holding company ownership.

To a certain extent these results are supportive of the Grossman-Hart-Moore story about complementarities in production; but they are not entirely so. Ownership patterns appear to be only weakly related to trading activities. Put the other way around many of the main trading partners that one would have expected to have seen represented in the ownership of these firms are not present. In this respect, the French and German models appear quite different from what has been recorded for Japan, where corporate groupings are closely associated with trading arrangements.

What instead distinguishes both Germany and France from the UK is the high concentration of ownership at each stage in the hierarchy. That concentrated ownership may be associated with related companies but not necessarily so. The presence of institutional owners is common to all countries. However, in the UK institutional ownership is diversified while in France and Germany it is concentrated.

Why does one observe the contemporaneous existence of two very different patterns of ownership?

5. A Theory of Ownership

The hypothesis that I would like to propound is that there is a tradeoff between alternative forms of ownership and the two systems that have been documented here reflect different points on that tradeoff.

The feature of stock market economies that has been widely documented is the liquidity of their markets. Stock markets provide low cost methods of transacting small lots of shares. In that respect there is probably not a pronounced difference between France, Germany and the UK. The UK may have a larger stock market but it is unclear whether it is more liquid. Some studies suggest that the Paris market may have lower costs of transacting than the UK.

Instead, what stands out as being a much more striking difference is the liquidity of the market for corporate control. In the UK, there is nothing to prevent a prospective owner acquiring control by purchasing shares on the stock market. Tender offers are a widespread form of acquisition of control in the both the UK and US.

On the Continent, trades in share stakes are by no means rare. On the contrary, France has a very active market in share stakes. Sales of companies and parts of companies are also commonplace in Germany. However, what is quite exceptional is for these transfers of ownership to take place through tenders. They are nearly always negotiated deals.

There is a very obvious reason why that should be the case. A prospective purchaser would frequently be unable to secure control of a company without the agreement of incumbent owners. Where majority or even large minority holdings reside with a small number of investors then the agreement of those investors is a prerequisite to a change in control.

What is the significance of that? A trade in control in France and Germany requires the positive agreement of a major shareholder or group of shareholders. In the UK, a large number of atomistic shareholders have to agree to sell but no one investor can be readily identified with the decision. Everyone and therefore noone is responsible for transfers in control in the UK. The stock market is a veil behind which responsibility for transfers in control can be hidden.

Like all veils of anonymity it has its good and its bad points. The good point is that where the evil deed has to be done, no finger of blame can be pointed. The market is the arbitrator and its judgement is final and irrefutable - a tonic for remedying special pleading, special interests, personal affiliations and mitigating circumstances.

That I would suggest is what many find both so attractive and so distasteful about the market. It is not that the market is good at valuing prices or providing information or reducing transaction costs. It is that it can achieve transfers of control at low cost.

The bad point is that one cannot have a pact with the anonymous. All those features of the market that make its power to transfer control so effective are precisely those that undermine its ability to commit. Where ongoing, repeated, relations between investors and other parties to a firm are required then anonymity is a positive drawback. There is a free-rider problem in commitment

Let me illustrate the problem with a simple example. Suppose that there are a 100,000 investors all owning one share in a firm. Suppose that assurance that current investment policies are to be retained requires the continuing presence of at least half of these shareholders. A prospect then emerges that offers some investors a higher return elsewhere. Since each shareholder has a negligible effect on policy decisions of the firm and since, on their own, their decision to retain or sell shares will have no effect on any one else, they will evaluate the alternative prospect purely on its financial merits. However, if more than 50,000 investors act similarly then collectively their decision to sell will cause a change in the policy of the firm. Even though investors may wish to make a commitment to maintain policies unchanged, they are unable to provide this. Other stakeholders (suppliers, purchasers and employees) who require long-term commitment from investors will be discouraged from making long-term investment commitments themselves.

Shareholders want to be able to take advantage of profitable alternative investment opportunities but they do not wish to suffer the consequences of the changes in control. In that respect the Continental system is a very effective system of ownership. It allows a large number of small investors to trade in investment opportunities without having any effect on

control. There are large investors that know that if they trade then there will be a change in control. If encouraging investment by other stakeholders is important then the large investors will have no incentive to trade while the small investors may.

Notice that the owner of the large sharestake need have no particular trading relation with the company in question. Concentration of ownership has the effect of internalizing an externality in control, irrespective of the nature of the owner. This means that one might not be able to extract many more empirical regularities from data on ownership than the one that I have already mentioned, namely concentration of ownership.

This is all quite interesting because it provides a rationale for the existence of concentrated shareownership irrespective of the nature of the owner. It is, of course, the basis of what I believe to be the fundamental deficiency of the UK economy: a systemic failure to commit. Its symptoms are those of short-termism but it has absolutely nothing to do with the mispricing of securities.

However, it leaves a lot of questions unanswered. In particular, why if there is this inherent advantage of concentrated ownership do we not have it in the UK and the US? At this stage I am afraid that I must bore you with another interest of mine - Eastern Europe.

6. Lessons from Eastern Europe

One of the remarkable aspects of studying Eastern Europe is that it allows one to witness at first hand processes of transition that have spanned decades and centuries elsewhere. Some people find the political and social dimensions of transition in Eastern Europe depressing. As social scientists we should regard them primarily as enlightening.

One of the great debates that has gripped Eastern Europe has been the appropriate form that financial reform should take. Basically, there have been two camps. In one camp, which numbers some of the most prominent academic advisors and the World Bank, sits those who

argue that the web of corruption and the grip of the nomenclatura is so extensive that a complete break with existing institutions is required through wholesale market reform. This involves privatizing enterprises as quickly as possible by distributing shares rapidly and widely. As a side benefit, stock markets will emerge that will allow investors to trade their shares. The Czech Republic is pursuing this line.

In the other camp sits those who argue that widely dispersed shareholdings have one devastating property: they provide no control over the management of firms. Actually I suspect that this is something of a misperception. It is not very difficult to reconcile dispersed ownership with corporate control: markets in corporate control provide effective remedies to the problem of deficient control. As I have expressed it here, the deficiency is one of inadequate commitment.

In any event one can see precisely the benefits of anonymity driving Eastern Europe towards dispersed share ownership. In actual fact, with a few exceptions it is most unlikely that many countries will follow this route; instead, the German model is much more influential in Eastern Europe than the Anglo-American. What the above thesis would lead us to predict is that concentrated shareholdings would be most in evidence where there is the least concern about existing institutional structure. That is precisely what I believe is being observed.

Work that I have been doing with Dr Wendy Carlin at University College, London reveals that concentration of ownership is even higher in East Germany than it is in West Germany. Majority share stakes of over 50% are even more in evidence in East Germany than they are in the West. In a sample of 103 East German firms, we found that majority shareholdings are present in over 90% of firms. These are generally associated with ownership by other companies, frequently West German firms in related lines of business. The role of banks is much less in evidence in East German enterprises than in the West. They appear unwilling to be involved in the high risk investment activities of East Germany. Even where there is no majority shareholder then there is usually a large minority shareholder. This is a striking revealed preference for concentration.

7. The Emergence of Financial Systems in the West

Concern with concentration of ownership probably has quite a lot to do with the development of the US financial system. The role of banks, in particular JP Morgan, in controlling US industry at the beginning of this century has been well documented. Financial reforms, not least the Glass-Steagall Act, in the 1930s were at least in part a response to concern about concentration of control.

This may in part have influenced the development of the UK financial system as well; but traditionally the UK has not displayed as great a concern about concentration of power as the US. I would suggest that the emergence of dispersed equity ownership in the UK has more to do with economic efficiency than distribution of power.

One of the striking characteristics of the German and French cases that I noted earlier was the continuing presence of families, even in the largest companies. I would hazard a guess that one of the most general characteristics of ownership and control of Continental European enterprises is the influence of families. The reason that this is surprising for a British observer is that we are deeply sceptical about control of firms being transferred effectively from father to son let alone to later generations. Indeed, the injection of new management is often thought necessary well before the original entrepreneur would voluntarily cede control. Initial public offerings by firms coming to the stock market for the first time are a key method of effecting necessary changes in control.

The question that this raises is why do similar problems not emerge on the Continent? Why does Germany not need a system that allows control to be ceded from original owners? I would suggest that the answer to this is that they already possess a very effective mechanism for doing this - corporate law. German companies beyond a certain size need a supervisory board with representation from employees as well as shareholders. Members of the supervisory board and the management board are appointed for fixed terms.

The importance of the two-tier system is the separation that it introduces between the ownership and control of enterprises. Representation of several shareholders and stakeholders on the supervisory board helps to protect the interests of those who would otherwise be exposed to changes in policy of the firm. But more significantly, it provides an effective mechanism by which changes in management can occur without necessitating changes in ownership. Elsewhere, I have described this as control by committee rather than market. The system of rotation and supervision in a German board obviates the need for markets to change control.

In sum, the UK system of dispersed ownership and control through markets has emerged as a response to inadequate internal mechanisms of control. We are now locked into a system that requires dispersed ownership and markets for corporate control because of poorly performing mechanisms for changing control within firms.

If this description is correct then we would expect to observe much more use of markets for changing control in growing firms in the UK than in Germany. That is precisely what, I believe, is observed. This slide shows the number of firms coming to the stock market for the first time in the UK and Germany. Rather strikingly it shows on average ten times as many firms coming to the stock market for the first time in the UK as in Germany during most of the 1980s. Even the figures shown here for Germany are high by historical standars. Prior to 1980 less than a dozen companies came to the stock market for the first time in the whole of the post Second World War period.

8. Implications for Economic Theory and Policy

I would like to conclude by drawing out some implications of this analysis for economic theory and economic policy.

In relation to theory, one of the implications is the importance of understanding the institutional structure of firms. Arrow-Debreu while conceptually brilliant has had a

stultifying effect on some parts of economics. The pictures of corporate ownership that I showed earlier are the equivalent of the molecular structures of firms. They are central to the development of relations between different parties and, yet, we have very little to say about them. We are operating within a paradigm that has encouraged a concentration on precisely those components of economic interrelations that are the exception rather than the rule, namely contractual relations. We do not have an equivalent framework for analysing non-contractual relations.

In this regard the recent control theories of finance and ownership are very exciting. For the first time, they provide the basis for understanding the relevance of finance to economic performance. Where ownership patterns or financial structures have effects on control they have consequences for the real performance of firms. For example, the Modigliani and Miller irrelevance of capital structure proposition cannot hold in a model in which debt has different control rights associated with it from equity.

This is a start but my impression is that once one attempts to apply existing models to the types of questions that I have addressed today the analysis rapidly becomes unwieldy. In exactly the same way as Arrow-Debreu provided a simplifying framework for contracts and complete markets, so too a paradigm for non-contractual relations is required. That will permit some insights to be provided into the remarkable variety of ownership patterns that we have observed today.

And that brings me back to my opening remarks. The variety of capitalist systems is a much more interesting subject of analysis than a contrast between socialist and capitalist systems. The real policy question is what is the appropriate structure of a capitalist system. Since the economics profession has not yet focused on this issue, it is not surprising that it has not featured prominently in policy debates.

The recent Cadbury Committee report on corporate governance in the UK is a good illustration of this. The Committee was concerned with improving the functioning of corporate governance within a system of dispersed ownership and control; understandably, the Cadbury Committee did not feel qualified to comment on restructuring the UK financial and

corporate system. It therefore focused on methods of improving communication of information, strengthening the role of non-executive directors, protecting the independence of the chairman etc. However, what the Committee did not even consider is how the board should be used to bring about changes in control as part of the natural evolution of firms. This requires a fundamental change to corporate law not just corporate governance.

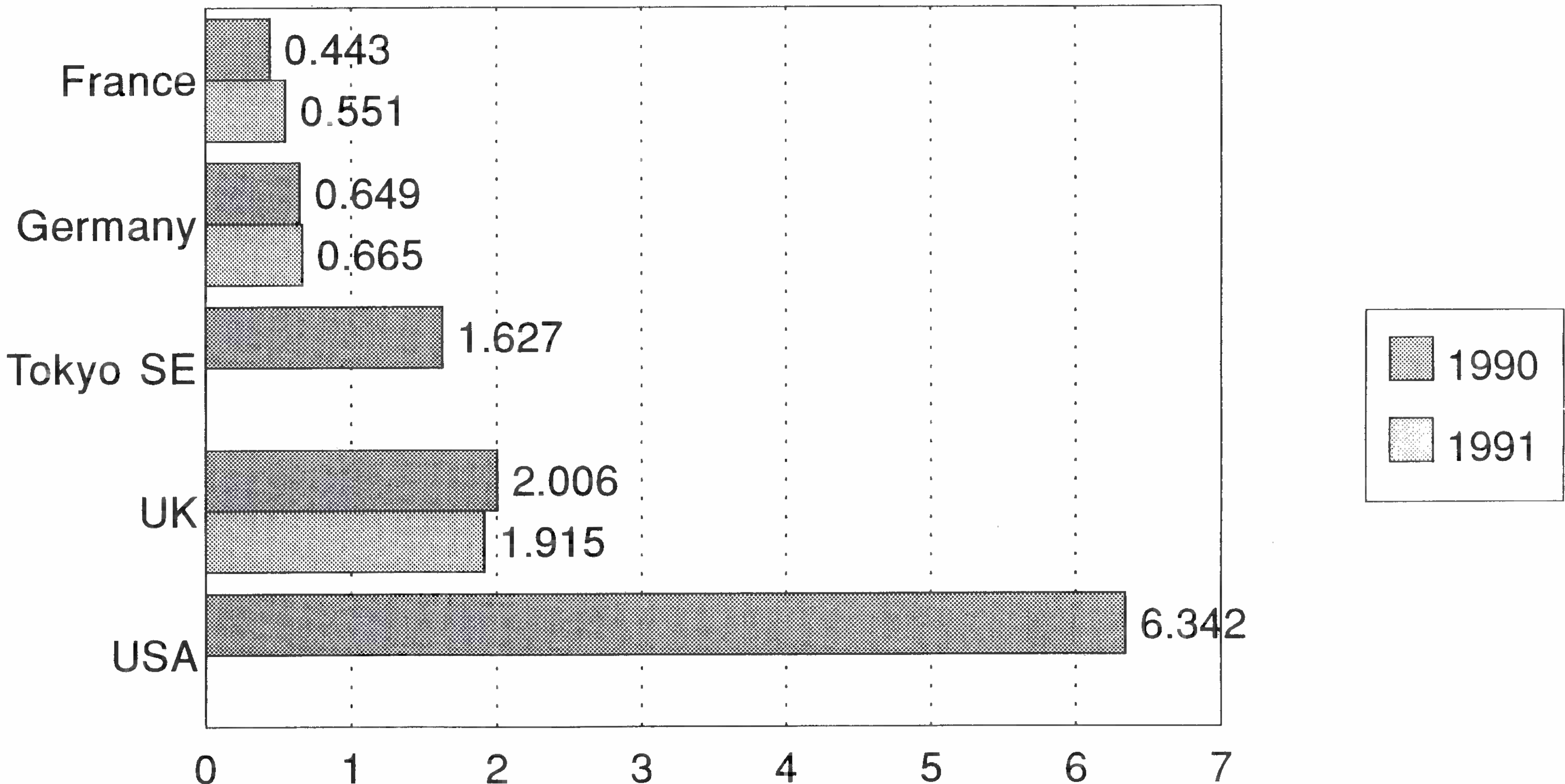
In the medium term that is precisely the direction in which change should occur. The implication of the above analysis is that improving internal control mechanisms is a pre-requisite to reducing reliance on market control mechanisms. The first stage is to find a method of transferring control in expanding companies without necessitating large-scale transfers of ownership.

However, it should not be assumed that change will be uni-directional. There is an active debate at present in Germany about corporate governance. There the main concern is about the ability of their system to achieve necessary structural changes in industry. A prominent example of this is the much needed but highly elusive restructuring of the German steel industry. Precisely as might have been predicted by the above thesis, the German system has been poor at delivering wholesale contraction of an industry. How can a fragmented industry with too many small companies be rationalized when all the existing chief executives want to remain in control? The answer in the Anglo-American system is straightforward: control is determined by competitive bidding. However, there is no equivalent arbitrator in the German system and industrial as against company restructuring is delayed.

Theory has suggested a trade-off; practice has confirmed its significance.

Comparison of the French, German, Japan, UK and US capital markets

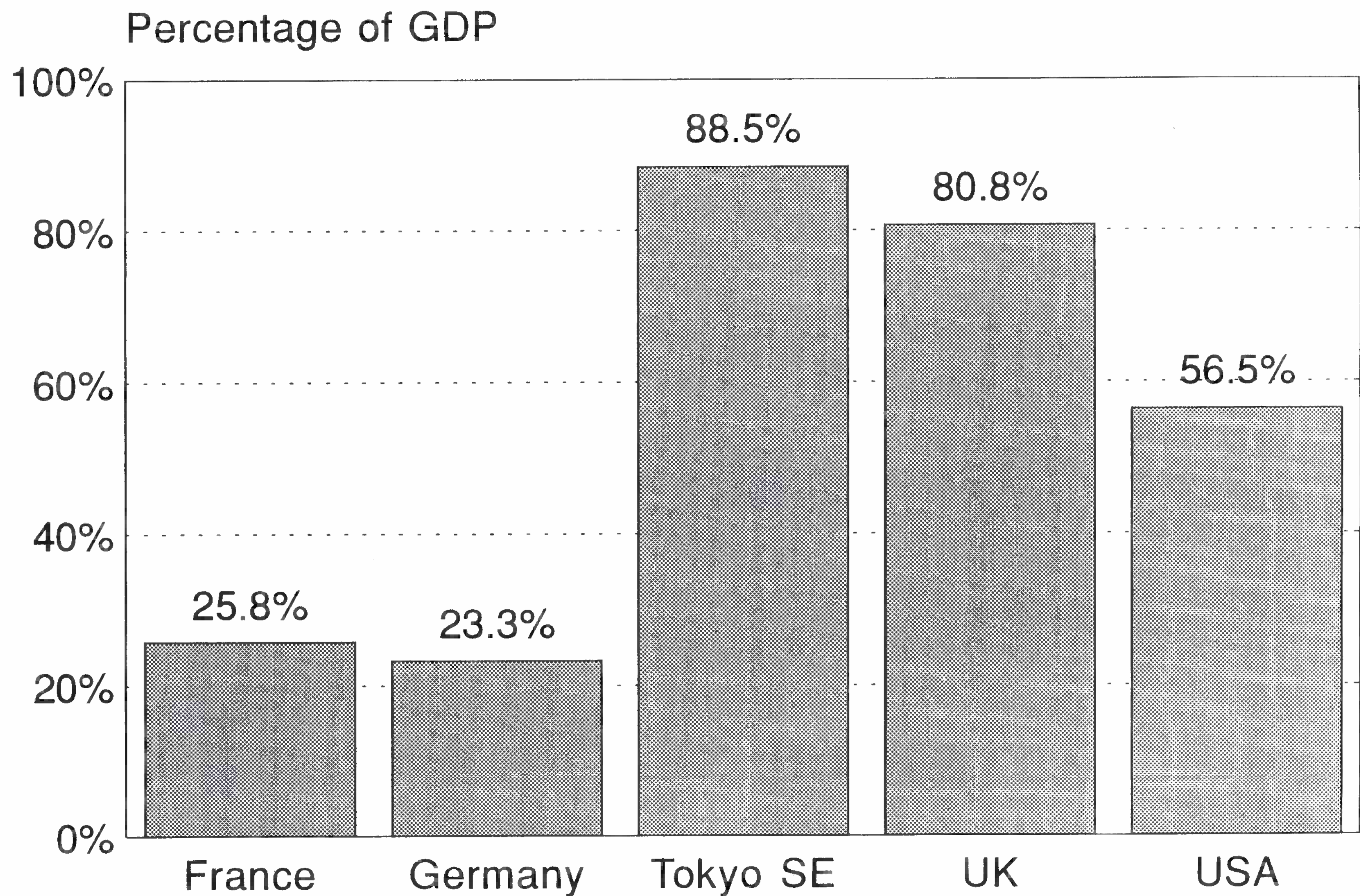
Number of domestic listed companies on stock markets



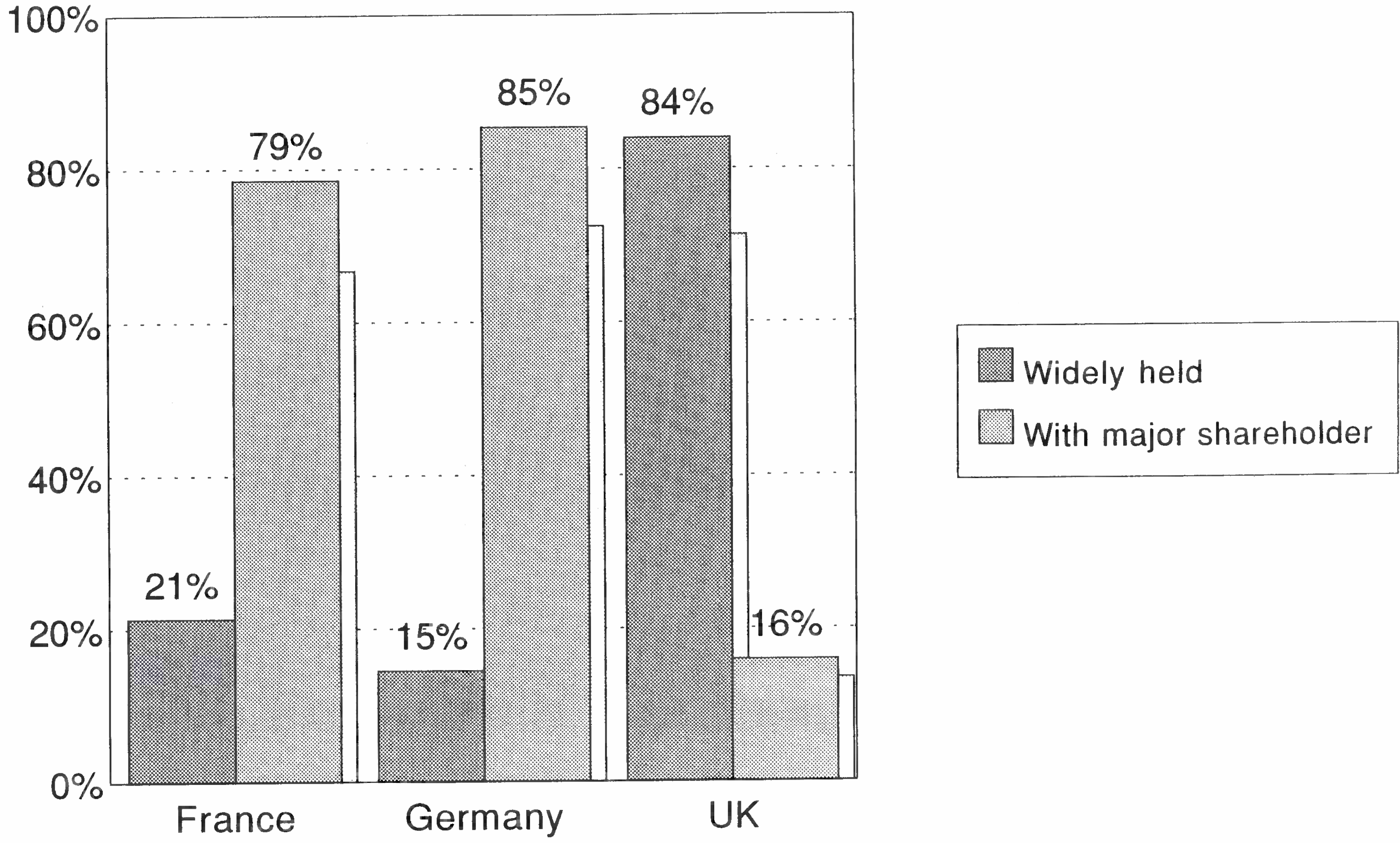
USA= American + NASDAQ + NYSE

Comparison of the French, German, Japan, UK and US capital markets in 1990

Market capitalisation of domestic equity as a % of GDP

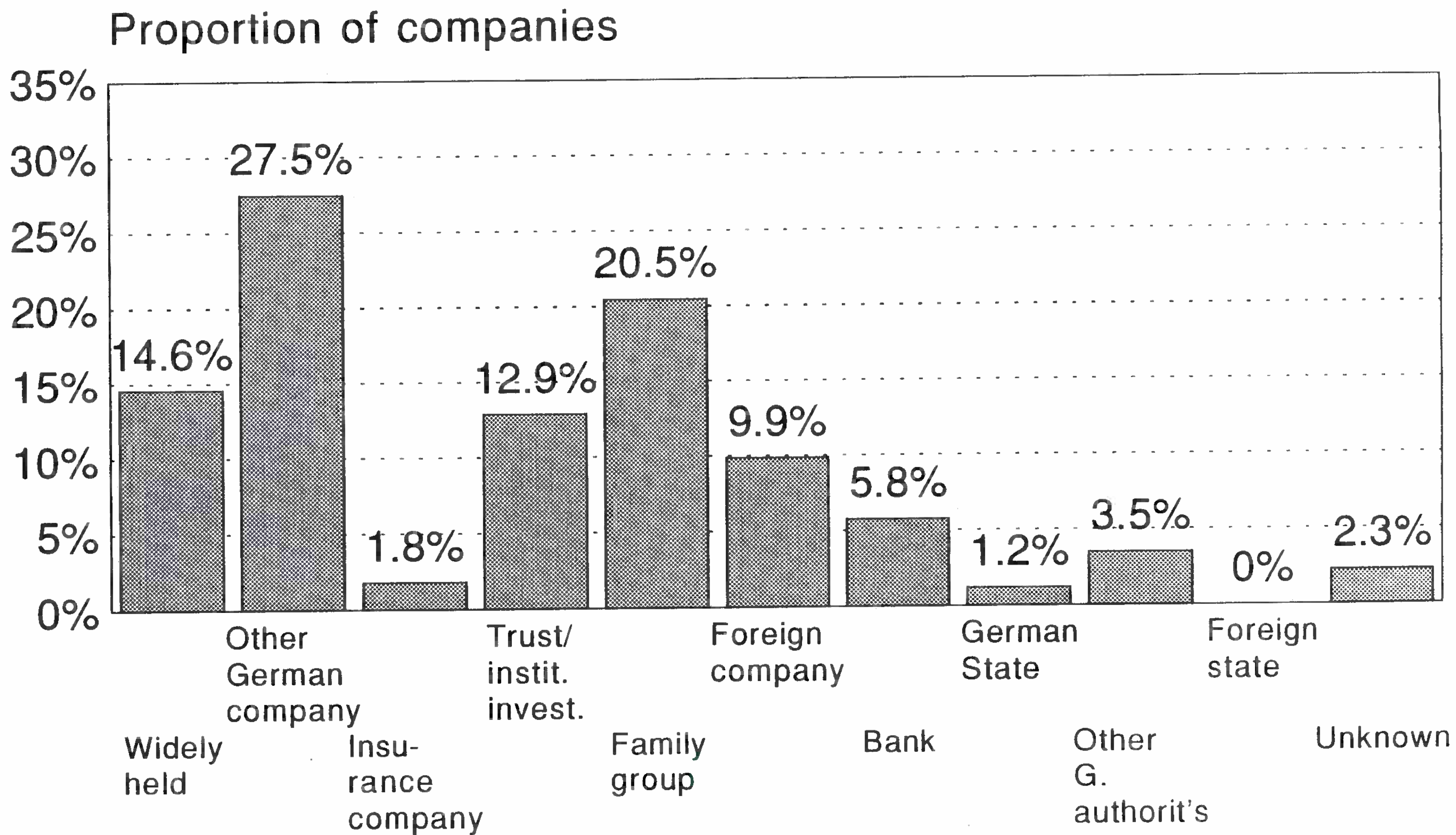


Graph 2



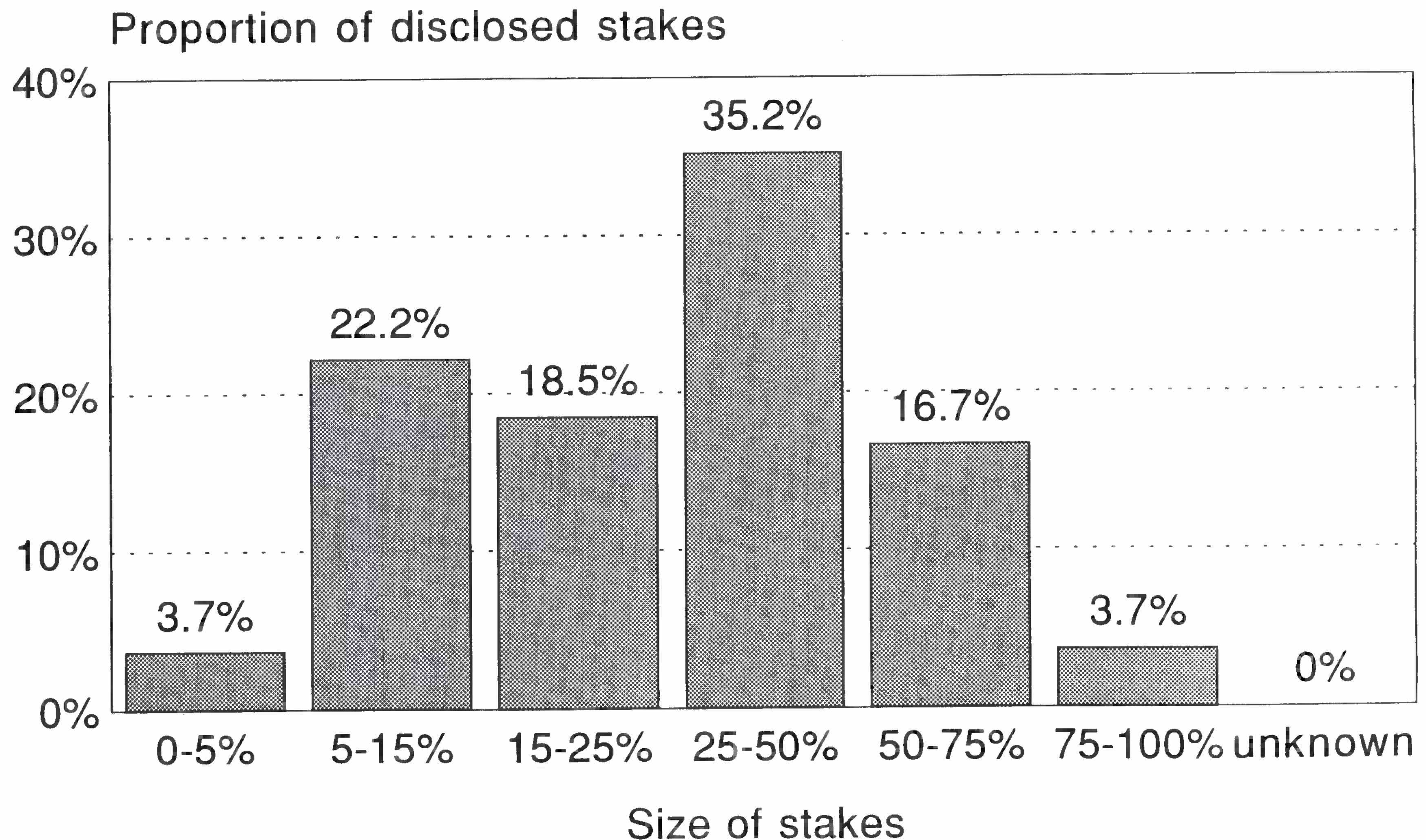
Graph 3

Share stakes in excess of 25%
in 171 German industrial and commercial quoted companies in 1990



Graph 4

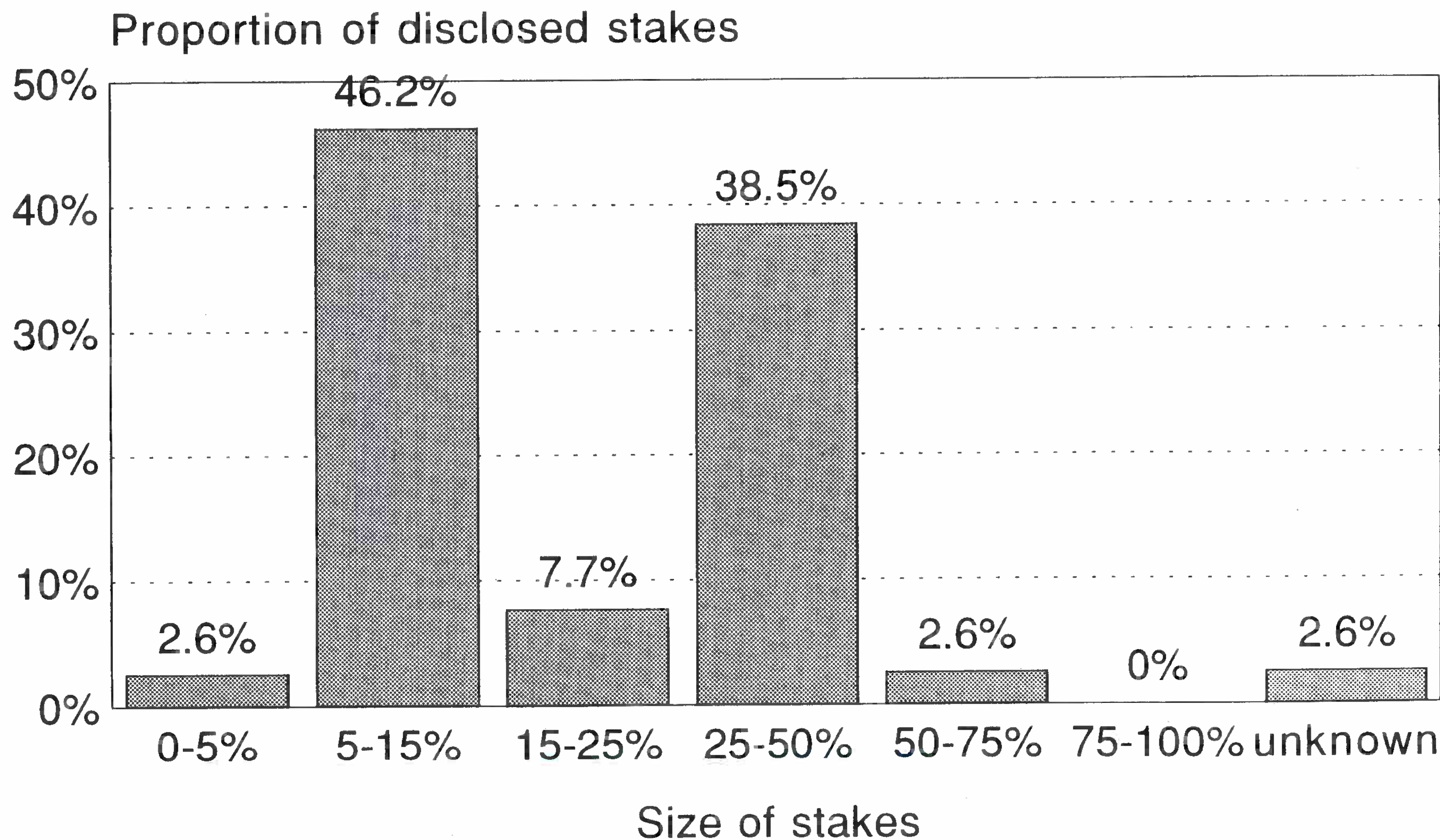
Disclosed stakes held by trusts / institutional investors
in 171 German industrial and commercial quoted companies



number of stakes = 54

Graph 5

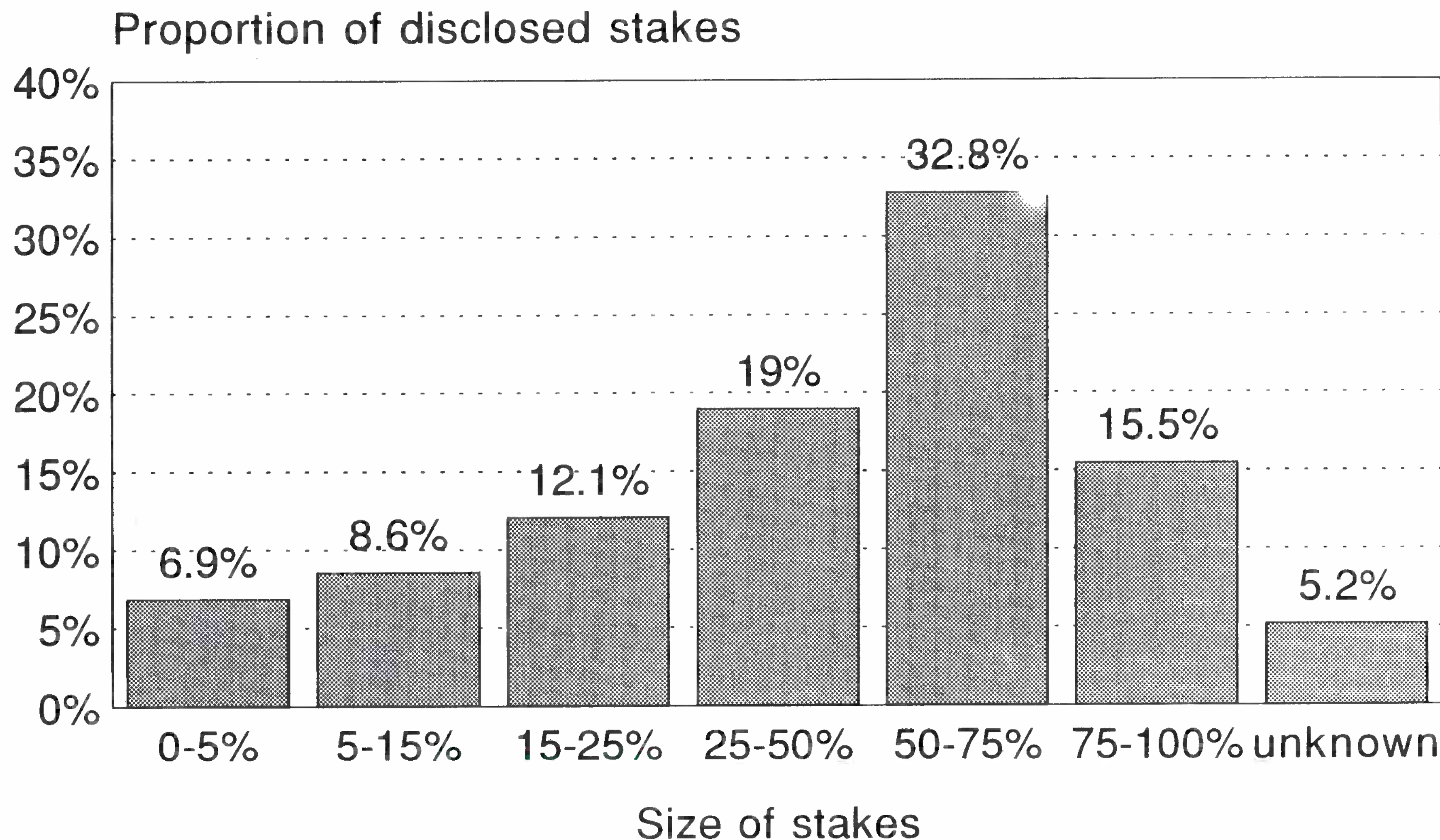
Disclosed stakes held by banks
in 171 German industrial and commercial quoted companies



number of stakes = 39

Graph 6

Disclosed stakes held by family groups
in 171 German industrial and commercial quoted companies

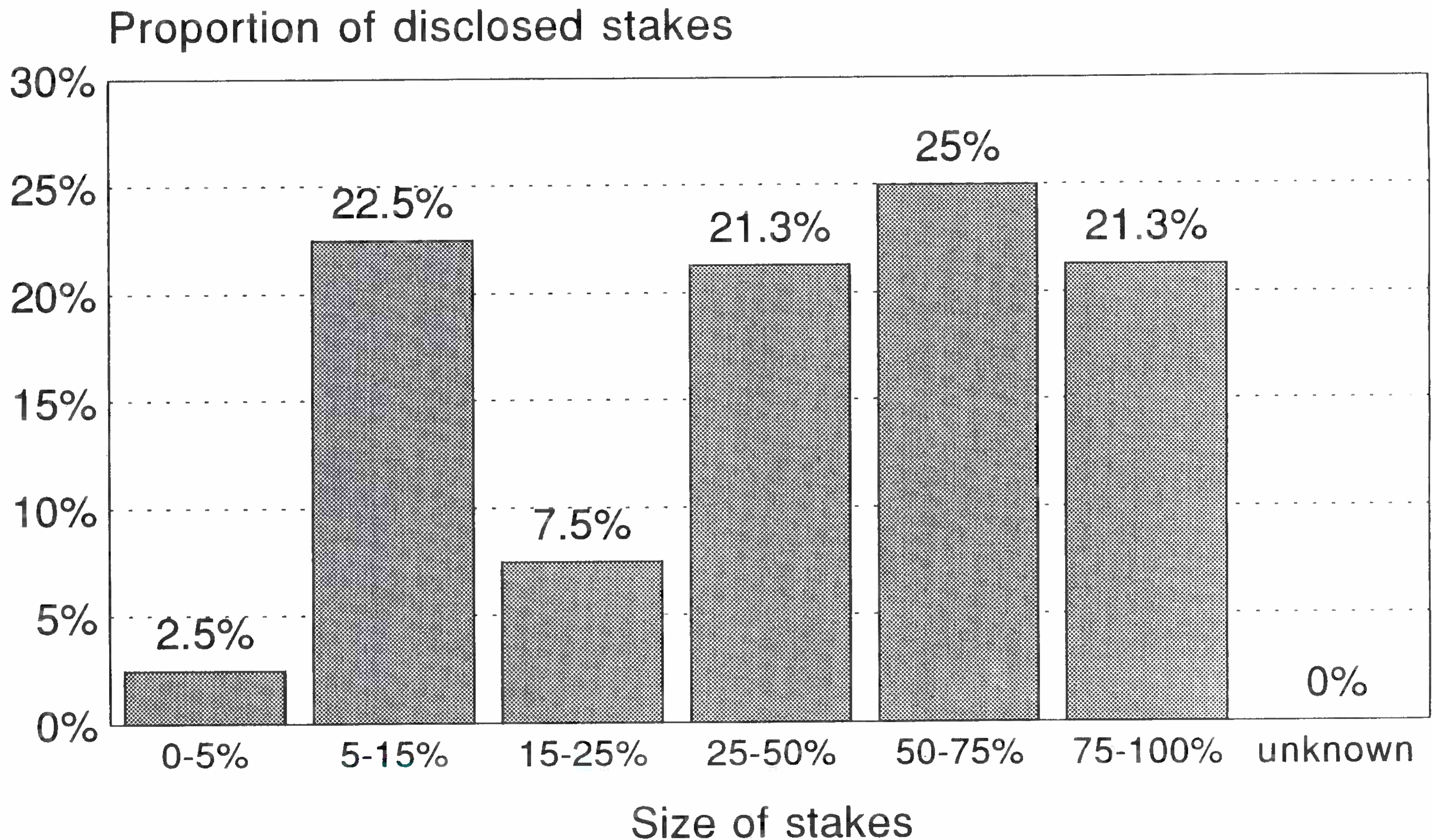


number of stakes = 58

Graph 7

Disclosed stakes held by other German companies

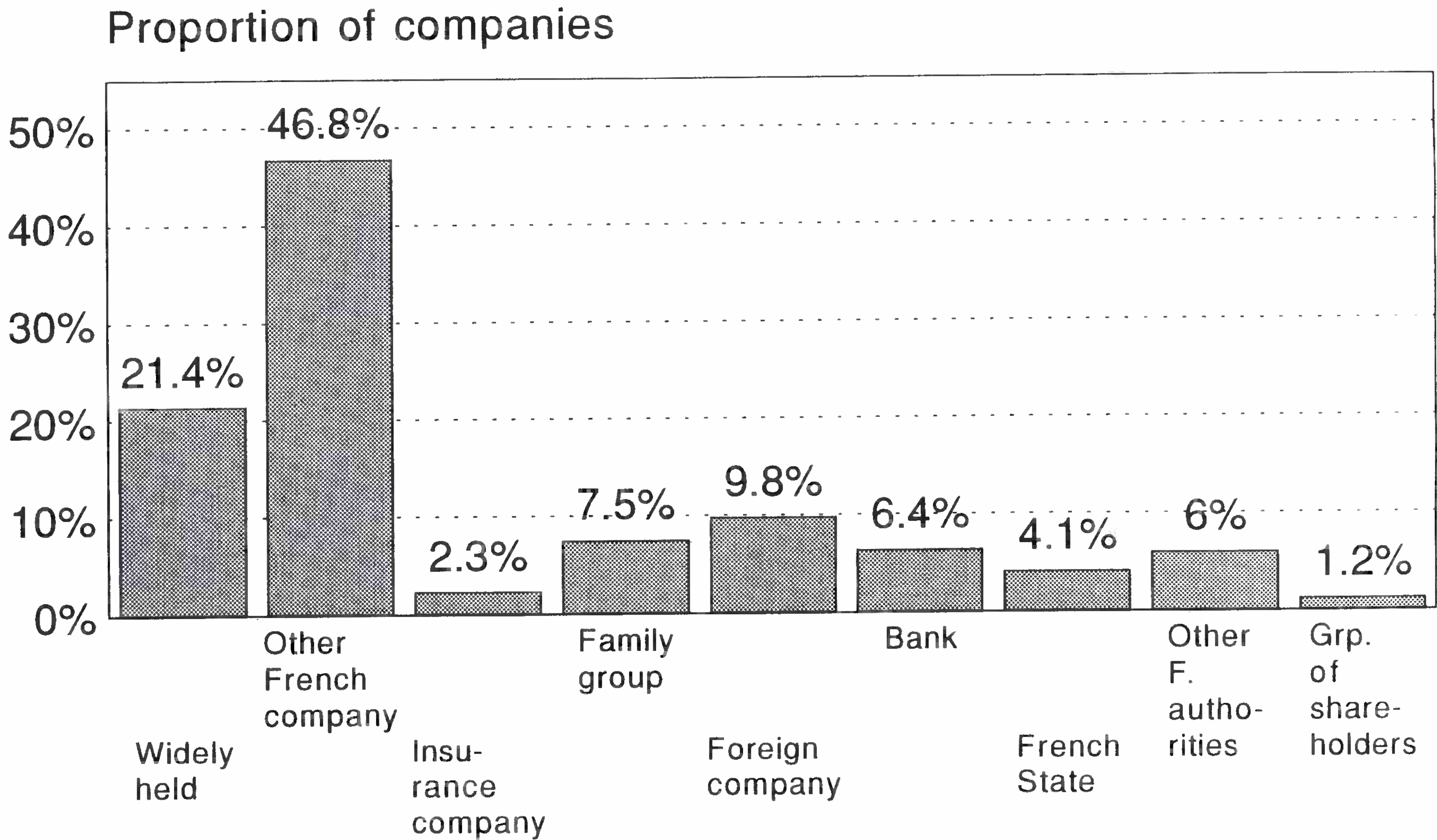
in 171 German industrial and commercial quoted companies



number of stakes = 80

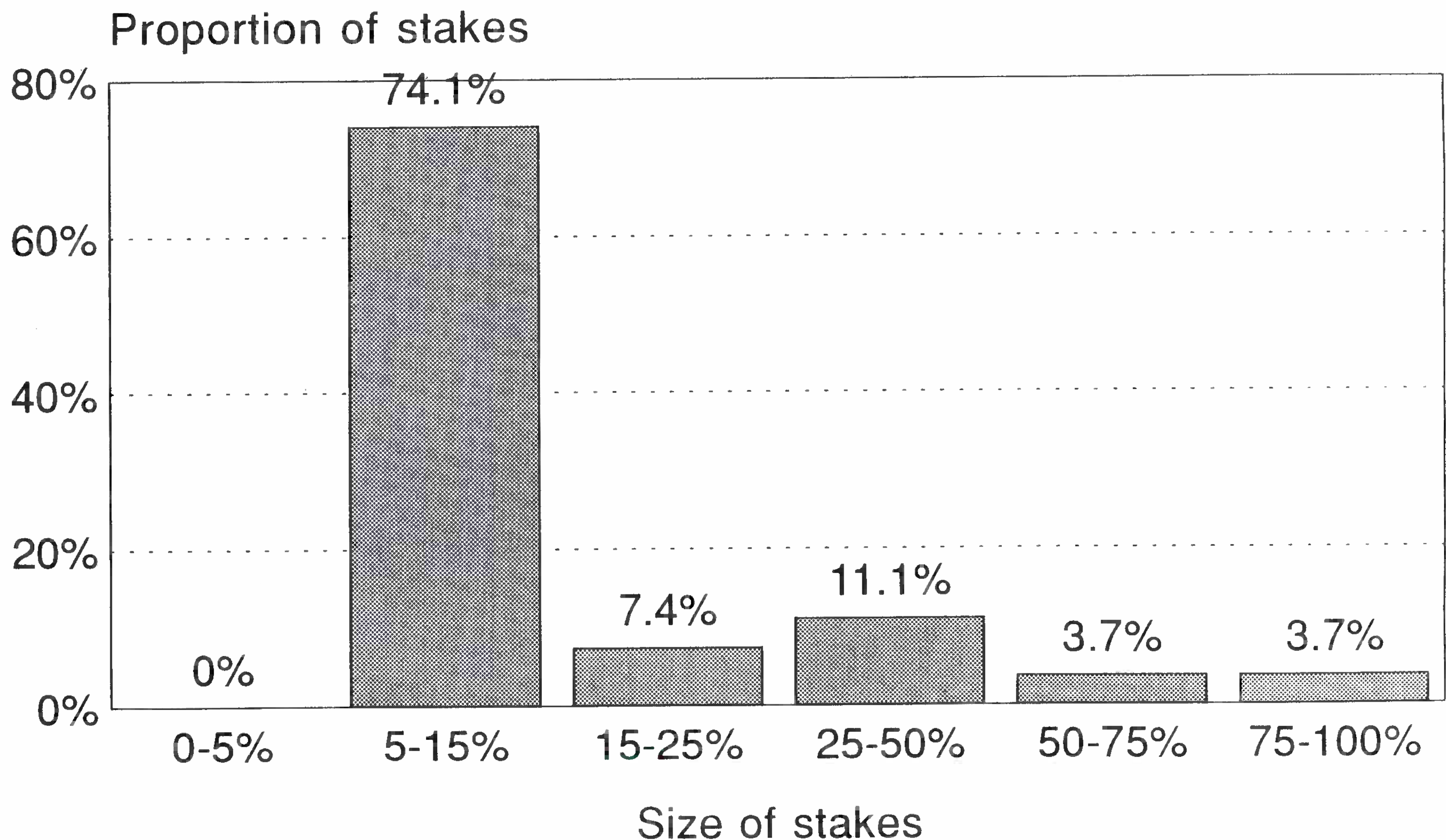
Graph 8

Share stakes in excess of 25%
in 155 French industrial and commercial quoted companies in 1990



Graph 9

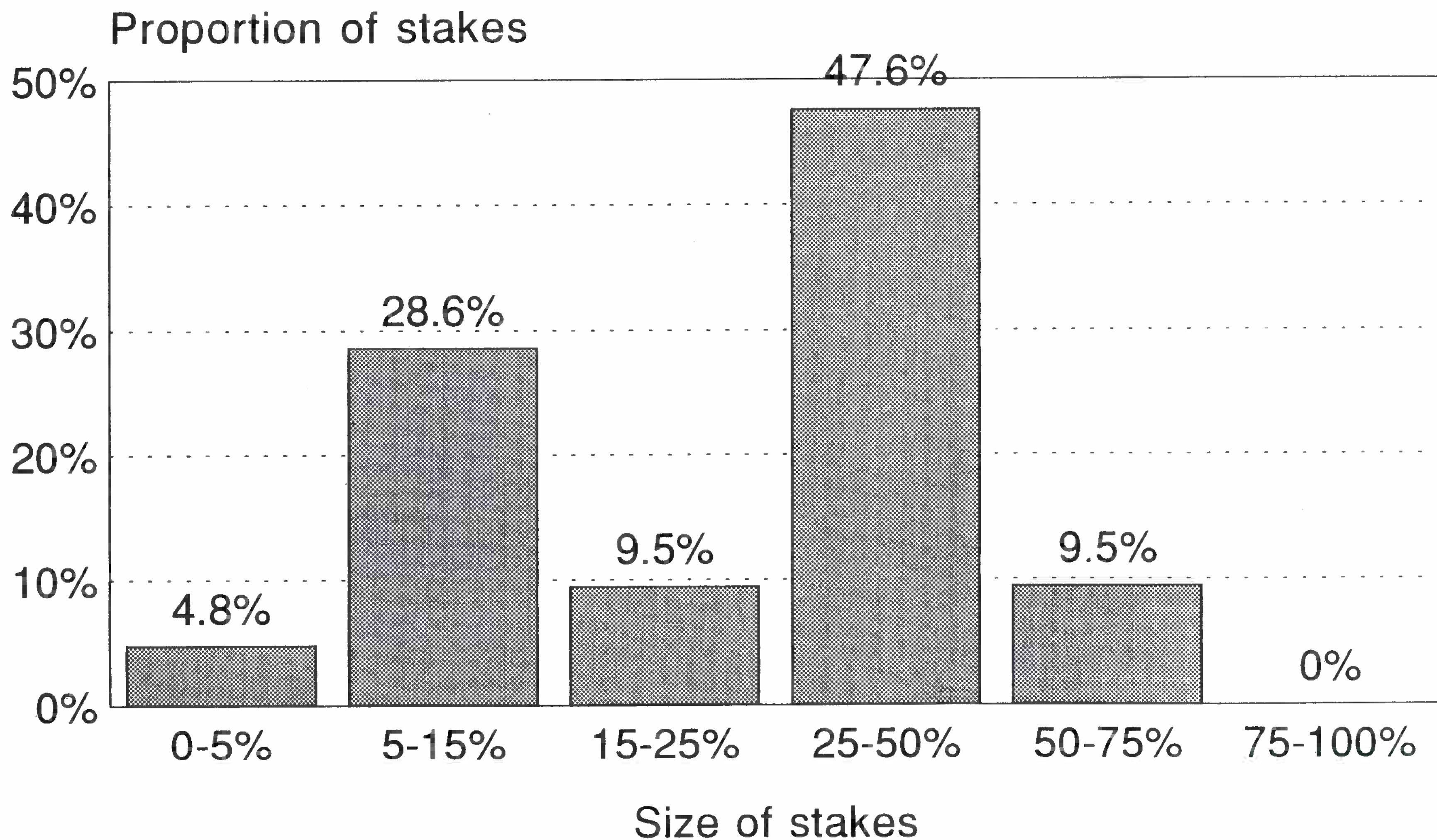
Stakes held by insurance companies
in 155 French industrial and commercial quoted companies



Number of stakes = 27

Graph 10

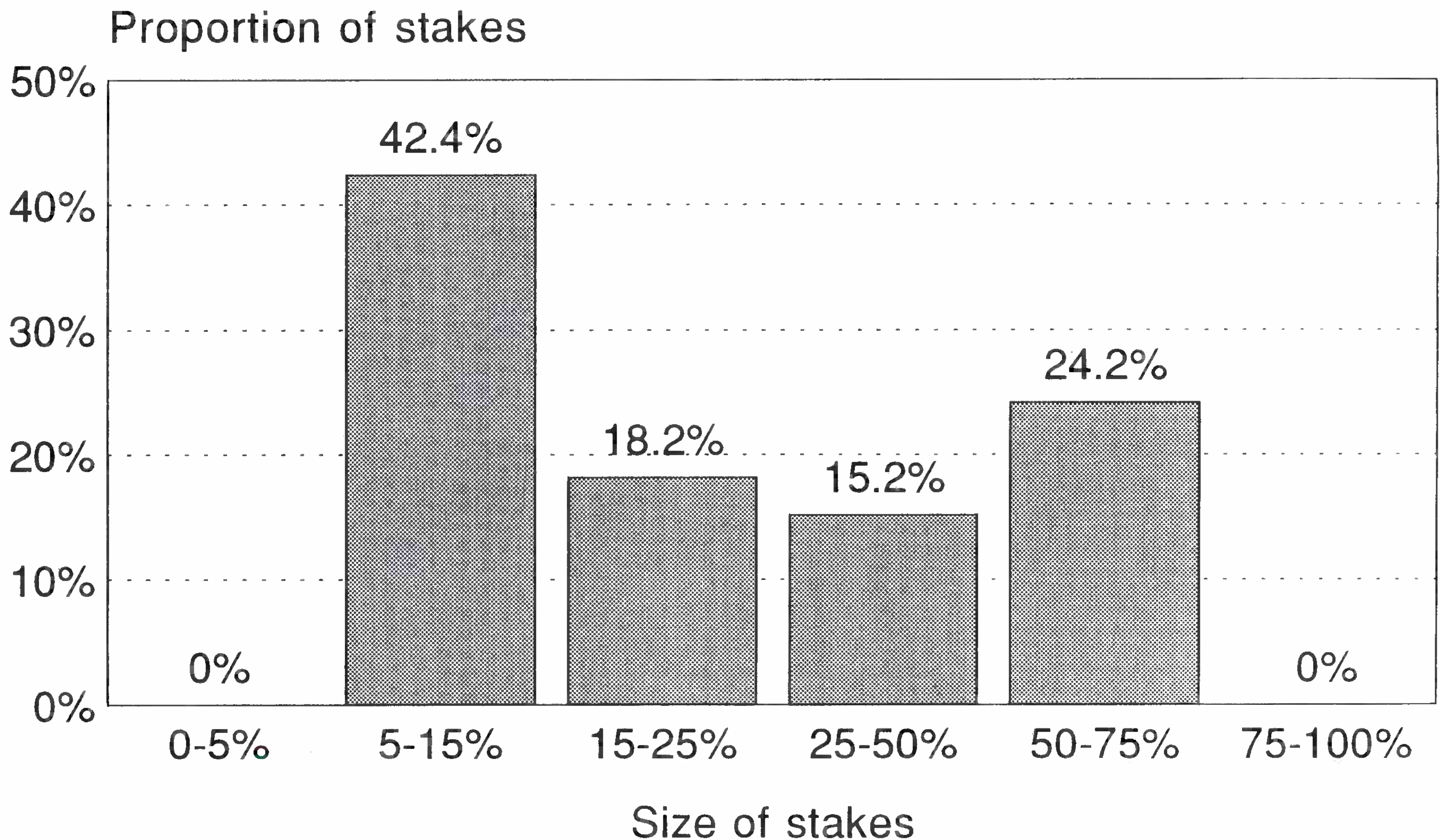
Stakes held by banks
in 155 French industrial and commercial quoted companies



Number of stakes = 21

Graph 11

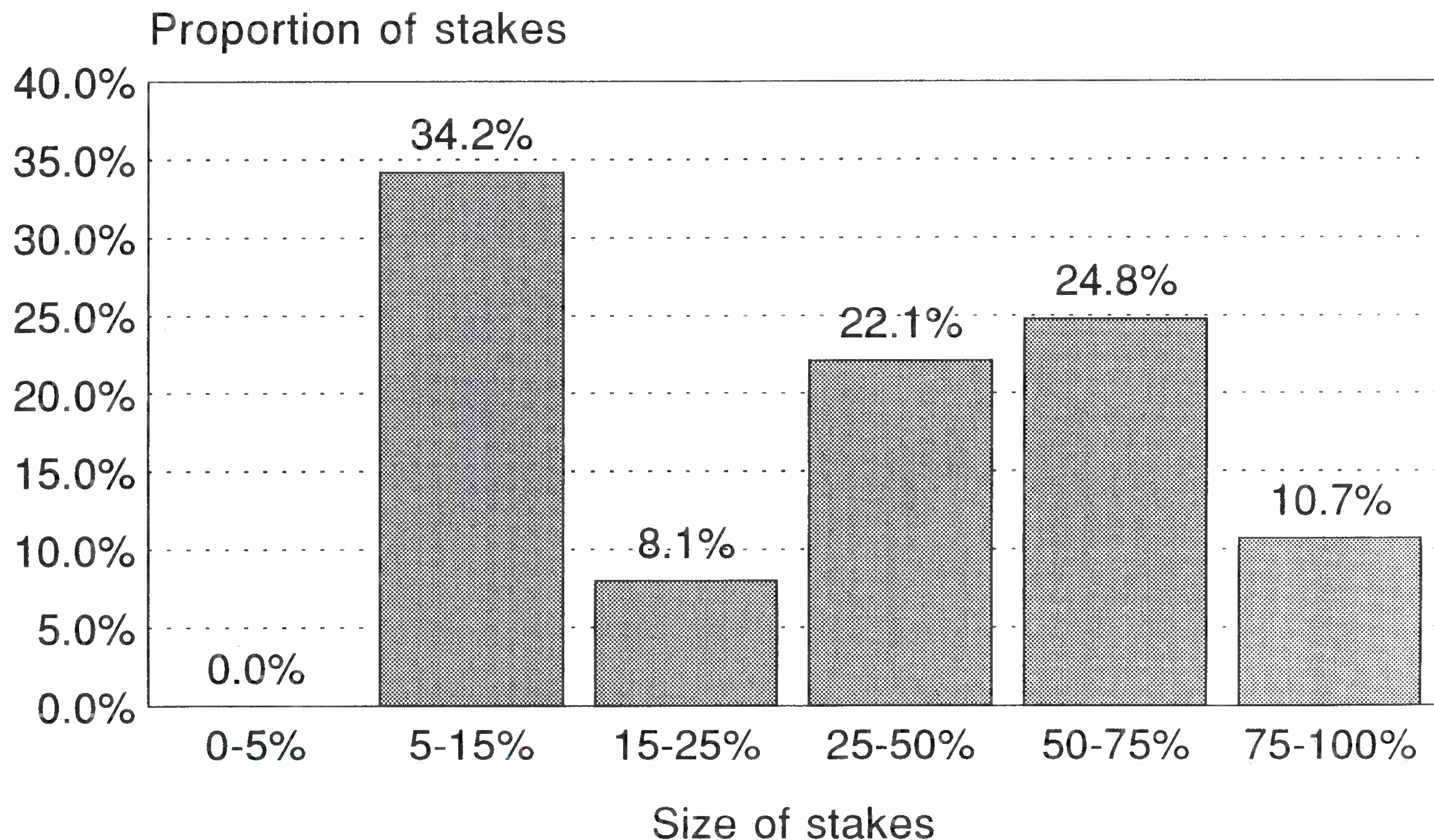
Stakes held by family groups
in 155 French industrial and commercial quoted companies



Number of stakes = 33

Graph 12

Stakes held by other French companies
in 155 French industrial and commercial quoted companies

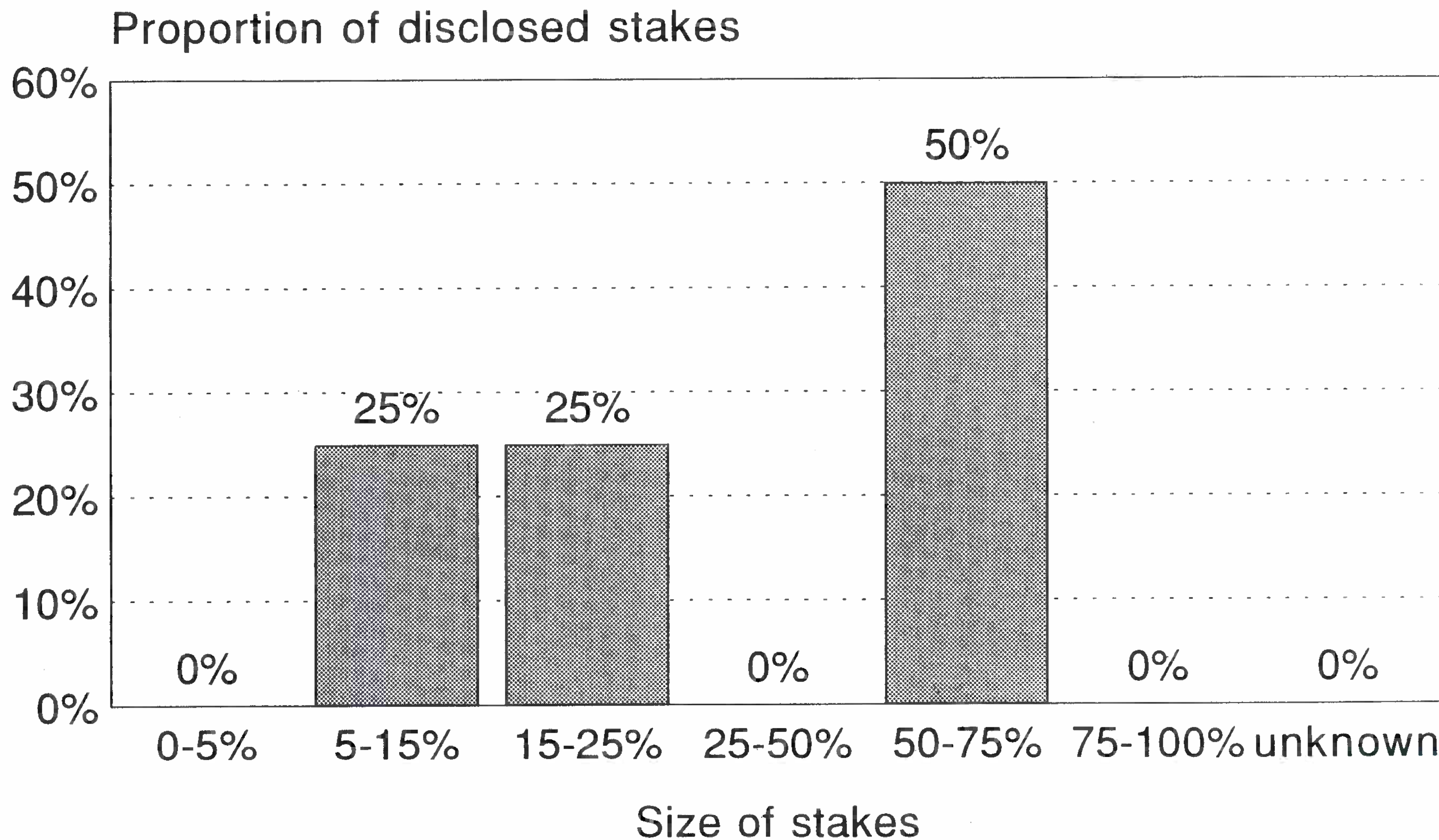


Number of stakes = 149

Graph 13

Disclosed stakes held by the German State

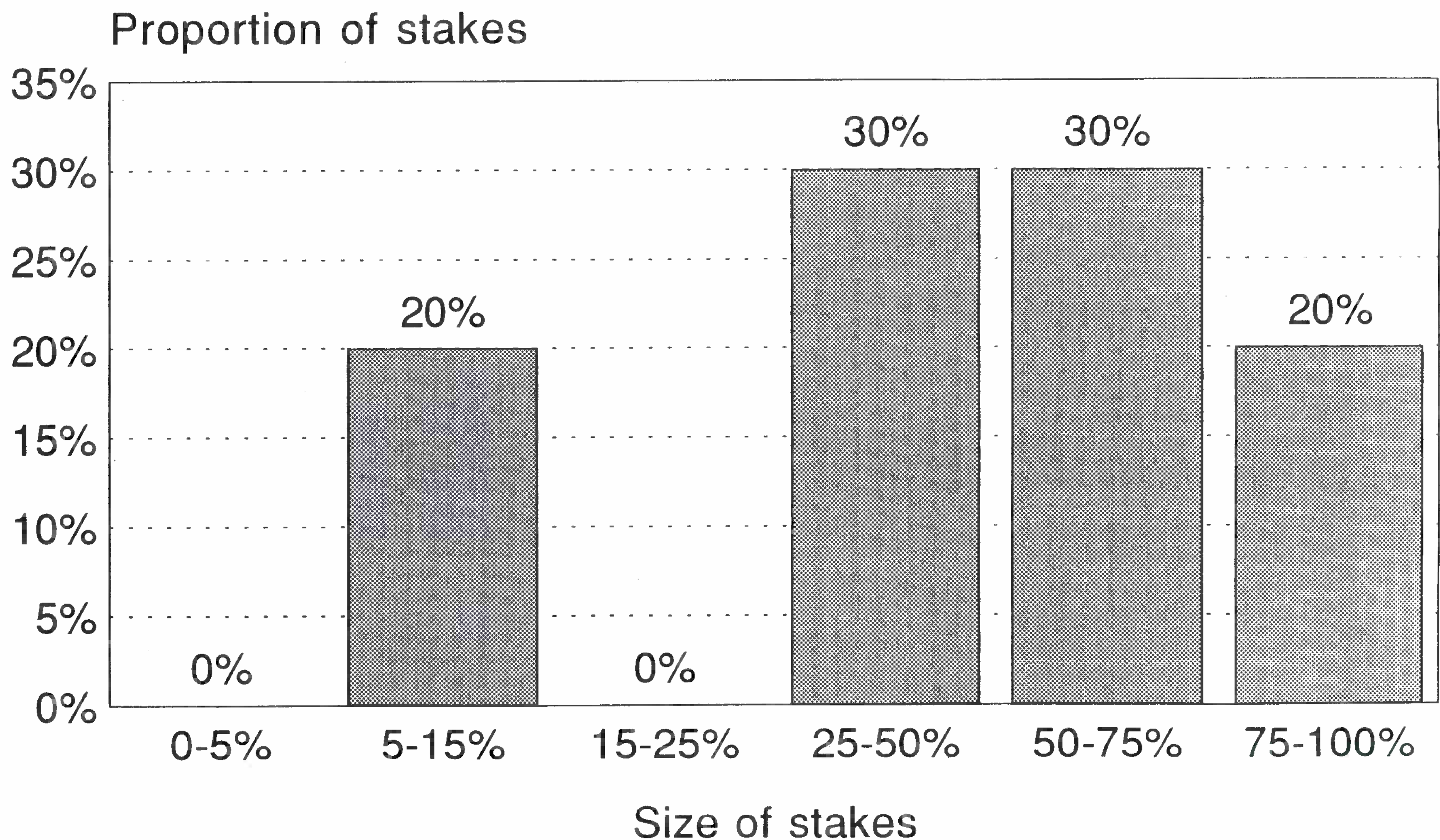
in 171 German industrial and commercial quoted companies



number of stakes = 4

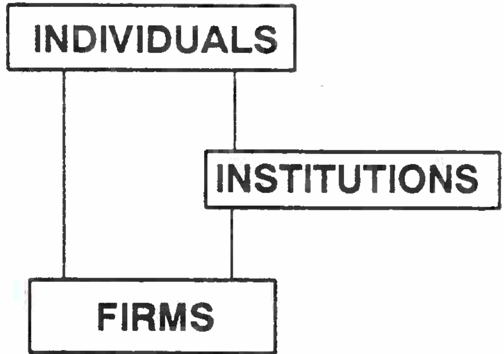
Graph 14

Stakes held by the French State
in 155 French industrial and commercial quoted companies

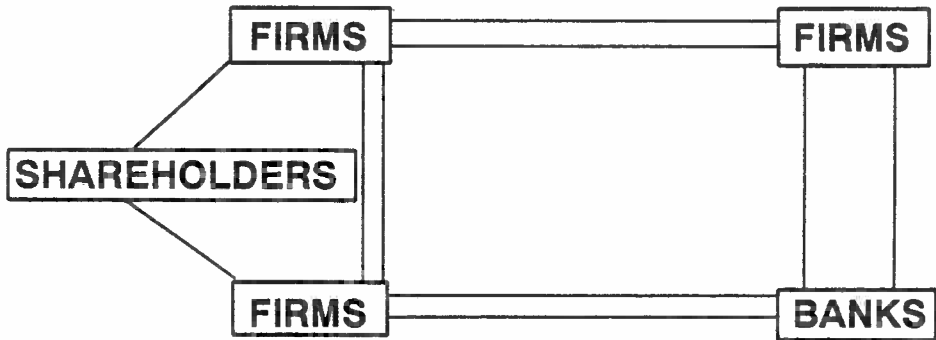


Number of stakes = 10

Graph 15

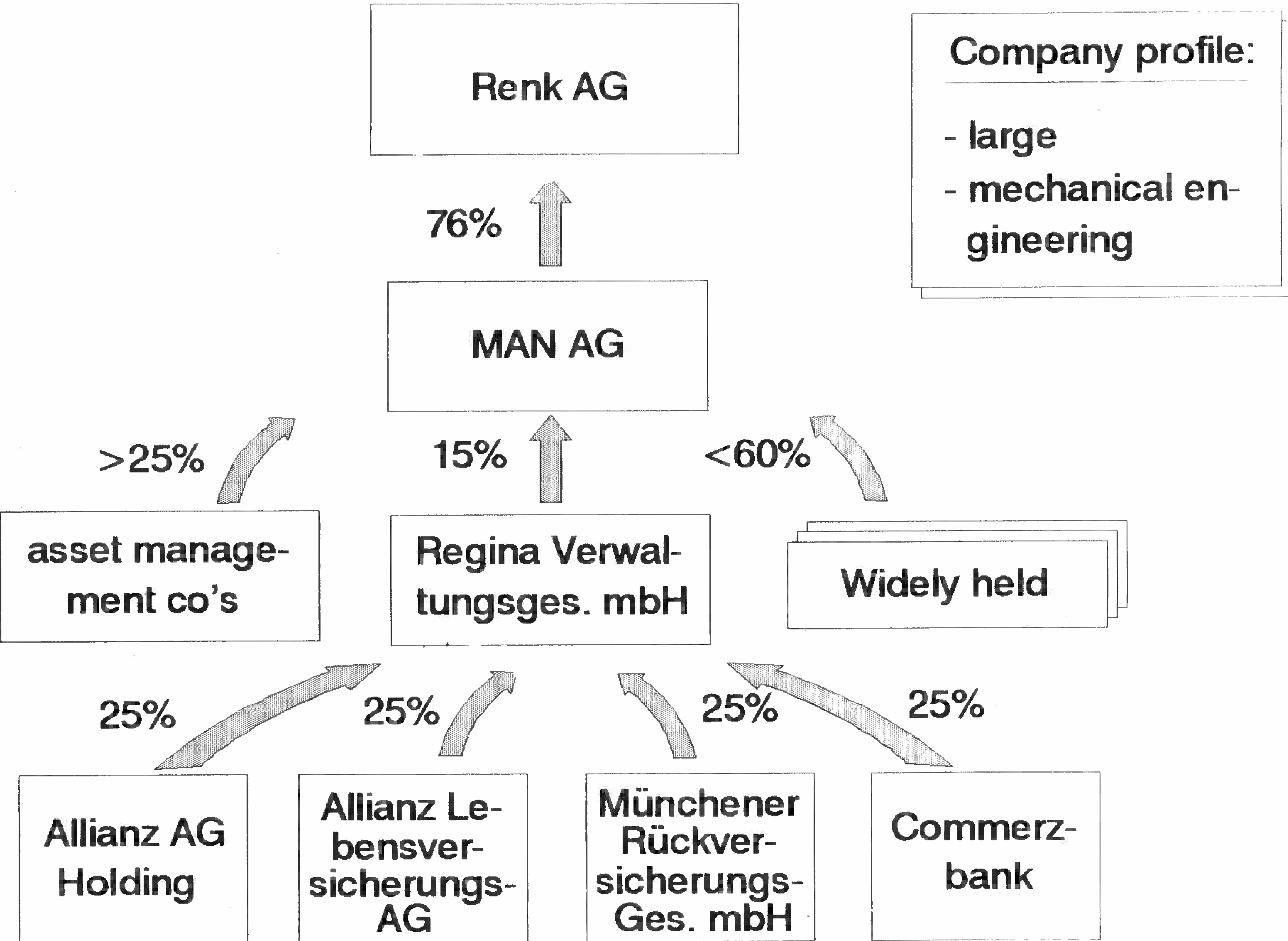


OUTSIDER SYSTEM

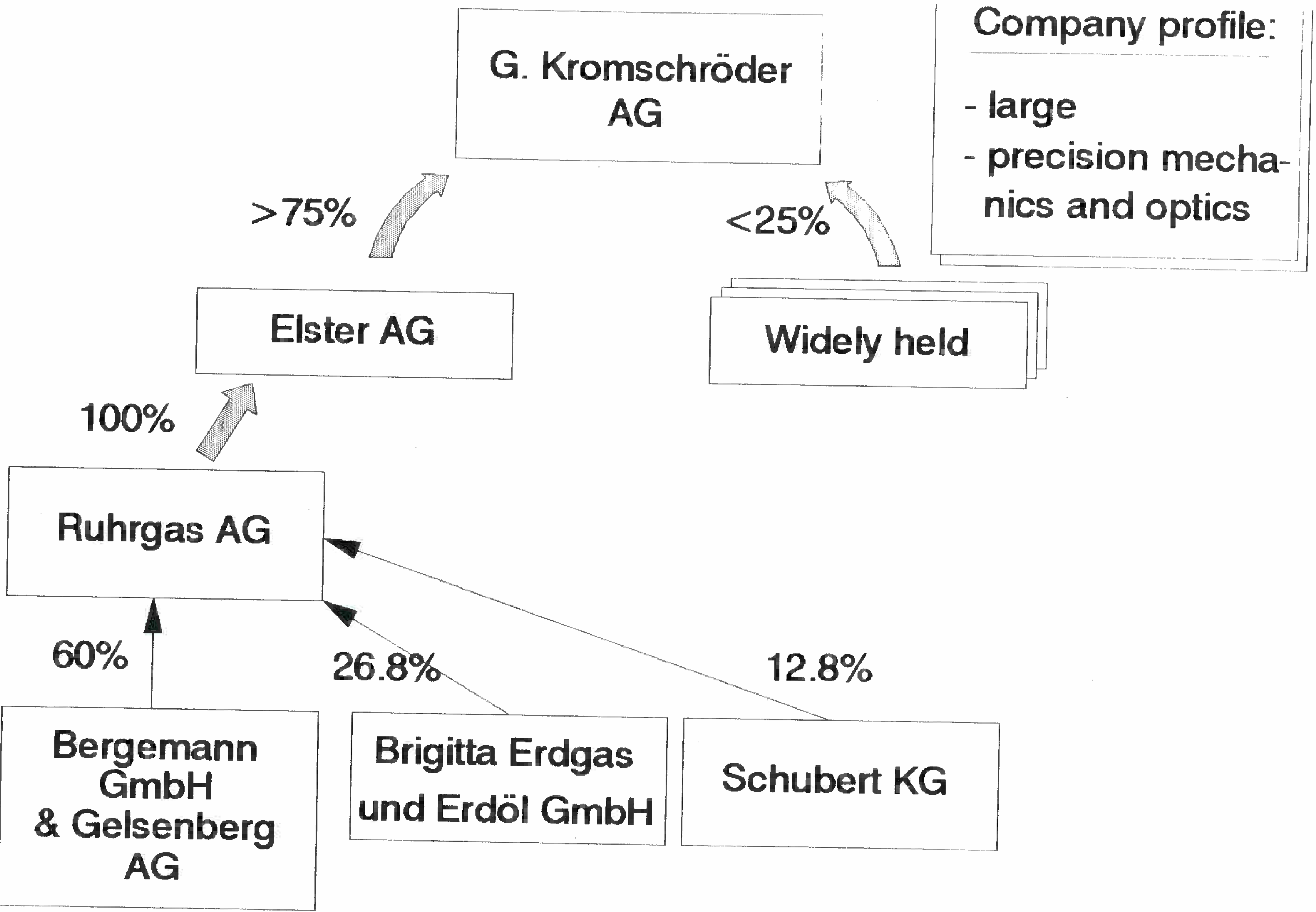


INSIDER SYSTEMS

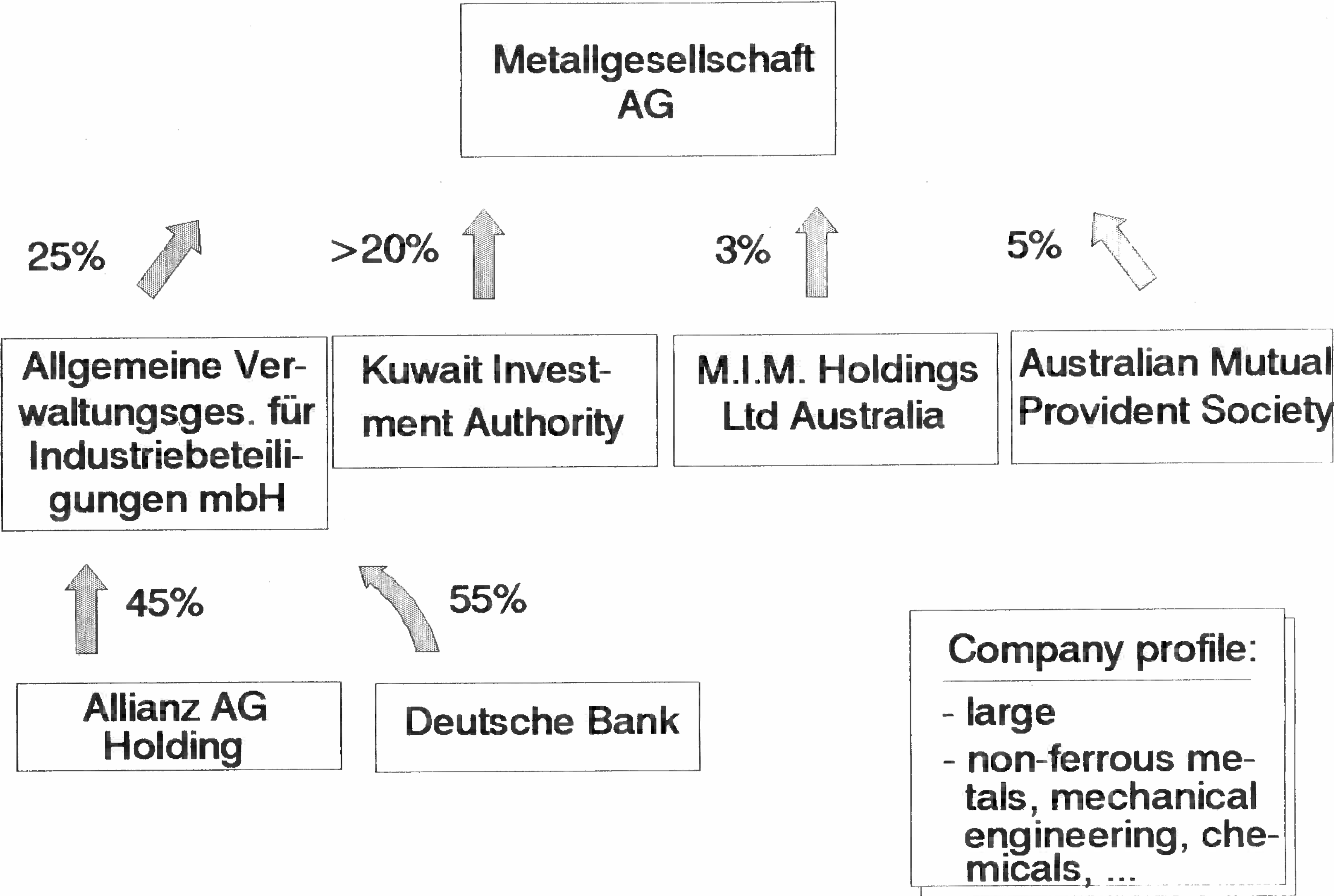
Graph 16



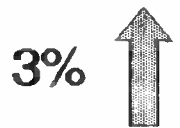
Graph 17

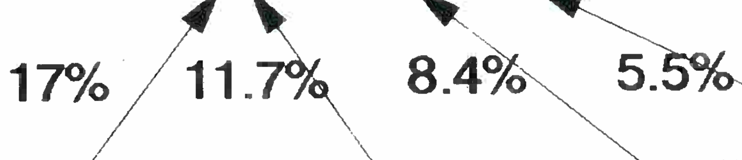
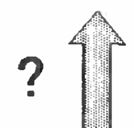


Graph 18



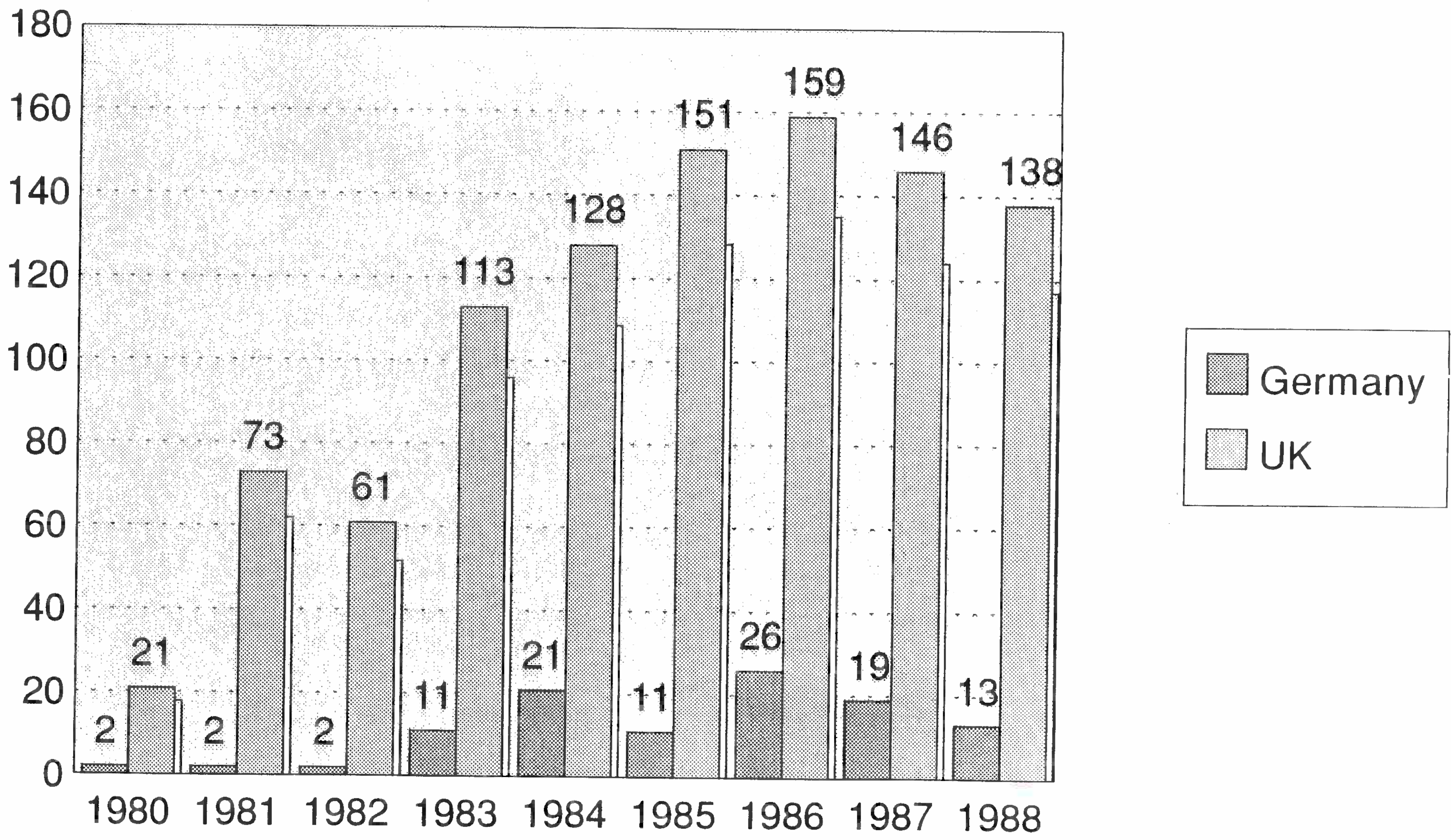
Graph 19



Graph 20

Unseasoned new issues by firms coming to the German and UK stock markets for the first time



Graph 21