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A Transaction-Cost View of Title Insurance and its Role in Different Legal Systems**

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Abstract

This article outlines a transaction cost theory of ‘title insurance’ and analyses the role it plays in countries with recording and registration of land titles. Title insurance indemnifies real estate right holders for losses caused by pre-existing title defects that are unknown when the policy is issued. It emerged to complement the ‘errors and omissions’ insurance of professionals examining title quality. Poor organization of public records led title insurers in the USA to integrate title examination and settlement services. Their residual claimant status motivates insurers to screen, cure and avoid title defects. Firms introducing title insurance abroad produce little information on title quality, however. Their policies are instead issued on a casualty basis, complementing and enforcing the professional liability of conveyancers. Future development in markets with land registration is uncertain because of adverse selection, competitive reactions from established conveyancers and the ability of larger banks to self-insure title risks.

Keywords: Transaction costs, property rights, land titles, title insurance, real estate, firm internationalization.

JEL: G22, K11, L85.

1. Nature of title insurance

1.1. Historical background

Title insurance is a contract whereby an insurer undertakes to indemnify the holder of a right in real property if he suffers a loss because the insured title is found to be defective, and to legally defend the title if necessary. It first appeared in its current form in the United States in the last third of the 19th century,¹ as a complement to errors and omissions (that is, malpractice) insurance provided by lawyers and lay conveyancers, most of which were operating in the context of poorly-organized systems of deed recording.² The added protection given by title insurance lies in greater coverage and improved enforcement. First, the insurance covers more risks because the insurer is liable even if there has been no negligence in the examination of title. Second, the insurer also offers better enforcement because he is obliged to pay compensation without it being necessary for legal action to be taken against

¹ Title insurance has a precedent in the old practice of providing the grantee with a third party eviction guarantee, under which this third party becomes liable in case the grantor fails to satisfy the deed warranties.

² Some explanation of the institutions used to enforce property rights may be helpful. Rights on land are stronger if they are enforced *in rem*, as ‘property’ rights (using the term ‘property’ in its legal sense). The reason is that rights *in rem* ‘run with the land,’ surviving all transactions; for instance, a lease enforced *in rem* is not affected by the sale of the land to a third party. This advantage comes, however, at the cost of additional transaction costs. Following the previous example, buyers of land would be worried about hidden leases. To prevent the potential existence of hidden rights *in rem* from hindering trade, most legal systems only enforce a right *in rem* if it has been made public. Modern systems apply one of two basic models of publicizing property rights on land: deed recording is used in France and the US and registration of rights in Australia, England, Germany, Spain and most other jurisdictions. These two systems present obvious differences: under deed recording, there is no mandatory ‘cure’ or ‘purge’ of transactions *ex ante*, as there is under registration. However, both systems are functionally similar: recording makes possible private assurance activities (including title insurance) that in fact provide voluntary *ex ante* purging of rights *in rem*. Further explanation and a comparative analysis is given in Arruñada (2002).

him. Moreover, the insurer is usually more solvent than the conveyancer and is liable for a longer period of time, not only to the customer but also to his heirs.³

At the start, this insurance was separate from title examination and worked as an additional guarantee. Rapidly, however, insurance companies took on other functions—those that had been developed by mere ‘abstracters,’⁴ such as the production and maintenance of ‘title plants’ (private archives that organize information obtained from public files), as well as the closing, or settlement, of transactions. Moreover, even if insurance companies do not explicitly provide title opinions, in practice they have made them unnecessary in ordinary operations. Their willingness to insure implicitly conveys the relevant information on title.⁵

Title insurance expanded substantially after World War II. The driving force was the demand for standard title guarantees on the part of creditors and, especially, of buyers of securities in the secondary mortgage market, often life insurance companies.⁶ Trends in the sector seem to have focused on addressing the needs of the mortgage loan market. Private property transactions require security, and secondary transactions involving mortgages require standard security whereby loans become a commodity. Since, in the US, public institutions (which, for property matters, operate on a state and local basis) do not provide this standard *in rem* security, private initiative provides it in contractual form. Initially, when those demanding security were local entities, their demand was met by local experts. Later on, with the development of distance loans and the secondary mortgage market, security of standard and reliable quality became necessary to allow for contracts with unknown persons. This took

³ See Palomar (2000, pp. 1-33 to 1-39).

⁴ These are practitioners that, after examining the recorded documents affecting a tract of land, prepare a summary of such transactions, called the ‘abstract’ of title.

⁵ This is more clear when no defects have been discovered and no risks are therefore excepted from coverage by the policy. More on this below. At present, only in a few jurisdictions is the insurance policy purchased from the lawyer who writes the deed. In fact, in many U.S. jurisdictions, for most residential transactions the title company writes the deed itself, without any lawyer intervention, even if it does not provide a formal title opinion to its customers and its title examination has internal value only. Initially, this loss of functions was detrimental for US lawyers specializing in real estate and their opposition led some states to adopt restrictive regulations. The issues involved are similar to those arising when financial auditors provide their clients with non-audit services (Arruñada, 1999).

⁶ See Cribbet (1975, pp. 318 and 320), Rosenberg (1977, p. 199) or Villani and Simonson (1982), who state with reference to title insurance that “its essential service is to convey to national markets the quality of locally produced title searches” (p. 266).

the form of title insurance. At the end of the 20th century, title insurance was taken out in 85 per cent of residential sales and purchases in the United States.⁷

1.2. Preventive assurance instead of casualty insurance

The salient attribute of title insurance is that most of the risks it covers have already occurred when the policy is issued. Furthermore, a standard clause explicitly excludes coverage of any defects arising after the date of the policy. This makes title insurance very special. In other branches of insurance, risk assumption is the common practice: in exchange for a policy, the insured party covers himself against a future and uncertain risk. Title insurance, on the other hand, covers against risks associated with facts that already exist but that are unknown when the policy is issued and may or not be discovered in the future.

Therefore, the activity of insurance companies is based not on risk spreading or loss compensation but on loss avoidance. To this end, they attempt to identify all preexisting title defects and to carefully perform closing services. The rationale behind title insurance is not mere risk aversion on the part of the insured, but the provision of powerful incentives for the screening of preexisting risks, and the correct performance of closing services, thus avoiding the emergence of new risks. Title insurance is therefore better seen as an arrangement for reducing transaction costs, by motivating the production of information and the enforcement of liability. As we will see, this is achieved both directly, when insurers integrate such functions, and indirectly, when their role is limited to enforcing the professional liability of those providing them.⁸

⁷ According to Webster (1999a). See A.M. Best (2000) and Nyce and Boyer (1998) for detailed analyses of the industry's economic structure and Lipshutz (1999a, 1999b) for a discussion of its future.

⁸ The analysis therefore ties in with the transaction costs theory of insurance (for a recent survey, see Skogh, 2000). In the US, title insurance reduces transaction costs directly by allocating the residual claimant status to the specialist producing the information and transaction services. We will see that its role in Europe seems to focus on improving the bargaining position of the insured party (partly in line with the analysis in Kirstein, 2000). Compare Baker *et al.* (2002), who take insurance premiums as a proxy of ex post risk, "to capture the expected cost of a defect, which equals the probability of an error occurring in the title record times the cost of repairing the defect".

The fact that title insurance covers risks in the past means that it suffers little danger of moral hazard (opportunism in the form of events subsequent to issuance of the policy), unlike other types of insurance. It is, however, susceptible to a high degree of adverse selection (the worst risks are the most likely to take out such insurance). This means that serious difficulties would arise if titles were insured without carrying out a prior examination of title. Fraud, especially, would be rife. For example, insolvent debtors could easily sell their mortgaged properties because the insurance company would have to indemnify the new grantee when the mortgagee steps in to repossess the property. Therefore, even if in principle the title insurance company is not liable for the examination of title and could in theory offer casualty or actuarial insurance without investigating the title being insured, it is in its own interest to have the title assessed by a professional or to do it itself.⁹

This need for an examination of title explains why the total losses paid out to clients or spent in defending insured titles add up to a small proportion of companies' total revenue, around seven per cent, a much lower percentage than in other branches of the insurance industry (see Table 1). They have every incentive to devise the means to discover in advance and to correct any defects in the titles before they provide coverage. In order to improve the efficiency of title searches, since the 19th century most title companies have kept private databases, known as 'title plants,' which are better organized than the official files in two main respects. On the one hand, by using tract indexes, they provide fast and reliable access to all relevant information on each property. On the other, they contain updated and integrated information, as changes in not only the deed recorder but all other public files containing information of interest are daily extracted ('taken-off from sovereignty'). Although these title plants are well organized, they only serve companies' internal administrative functions, however, as they have no legal effect.¹⁰

This emphasis on assurance or risk avoidance also explains why title insurance companies have increasingly taken on the production of title information and the provision of closing services. No-one has greater incentives to detect past risks and to avoid new ones than the

⁹ State regulations in the US also place the emphasis on risk prevention because they usually prohibit or make it difficult for insurance companies to issue policies without first examining the title. In most States, title search is compulsory, and 35 of them compel insurance companies to use a title plant, an essential source of information for such investigations.

insurer who, if the worst comes to the worst, will have to pay out any losses resulting from either of these risks. It is therefore the insurer who is in command of the process and he will organize the task of risk screening and avoidance using whatever means he thinks fit, from branch offices to independent agents.¹¹ It would therefore be wrong to think that title insurance today (unlike the early days) provides just ex post economic security but not ex ante legal security. On the contrary, today it not only provides compensation to the insured party but mainly motivates the private ex ante discovery and curing or ‘purging’ of any title defects.

Title insurance, however, still includes an element of casualty insurance in spite of its focus on prevention. This can be seen in the losses that are still paid out by insurance companies in spite of the prior examination of titles. This is because it is impossible to prevent all risks, especially in view of the state of public records in the US. In addition and in exchange for a surcharge on the policy, insurers usually take on certain known, but random, risks. Also, when the title opinion on a certain title defect is doubtful and removing this ‘title cloud’ is not worth their while, insurance companies will be prepared to bear these risks or ‘fly specks’ on a purely actuarial basis, in exchange for a surcharge on the premium. Finally, the residential policy drawn up by the American Land Title Association in 1998 also covers some risks that are necessarily of a casualty type as they arise after signing, such as “post-policy forgeries, encroachments, clouds on title, adverse possessions, and easements by prescription” (Palomar, 2000, p. 1-25).

¹⁰ This lack of public function is necessarily the case as the incentives of the plant owner would be very poor otherwise. For example, there would be substantial conflicts of interest if the title insurer could manipulate the priorities of subsequent mortgages.

¹¹ Originally, there was a clear distinction between insurance underwriters who worked on a national or regional basis, and local title agents who worked on a local basis (Palomar, 2000, p. 2-2). Insurance companies agree with their agents that, once the title search has been carried out, an insurance policy should be sold to the customer and underwritten by the insurance company. The premium paid by the customer is shared between the agent and the insurer on the basis of the tasks carried out by each. Increasingly, the two figures are integrated in a single company or group of companies. Most independent title agents are escrow companies specializing in closing real estate transactions.

1.3. Process, products and coverage

The usual process begins with an abstracter summarizing the recorded documents, now most commonly using a title plant. This abstract is then revised by another employee of the company. The result of this examination is a preliminary commitment to insure—also called a preliminary title report, a title report or, simply, a title insurance binder—which gives the name of the owner and lists and describes any defects and encumbrances on the property.

This report is generally used as the basis for either curing any defect in the title (for example, lifting a mortgage or removing an encroachment) to place it in the situation stated in the sale contract, or for excluding any defects discovered from the insurance coverage by inserting them in the Schedule B of the policies.¹² These defects may arise from a wide range of rights, encumbrances and defects. The insurer usually informs the customer of these exceptions before the transaction is closed so that the contracting parties can duly negotiate a solution. The seller may cure the defect or give a discount to the buyer in exchange for accepting the risks inherent in the defects. For minor defects, the insurer may also be willing to extend coverage, at an extra premium. Otherwise the transaction may also be cancelled at this stage (Palomar, 2000, p. 7-2).

Once settlement has taken place, the insurance company issues a policy in which it replaces the name of the former owner which appeared in the preliminary commitment to insure with that of the new one and, where appropriate, the previous mortgage with a new one.¹³ The policy insures the title as it exists on the date of the policy. This date is typically the date of closing or the date on which the mortgage loan is disbursed (Burke, 2000, pp. 3-48 to 3-49).

¹² It is unknown what proportion of policies are issued only after all discovered defects have been cured and what proportion are issued with exceptions. In the latter case, the mortgagee usually requires the mortgagor to make a deposit or escrow to cover any possible risk associated with the defect. It seems that most policies do have exceptions but these cover minor ‘defects’ such as power line easements and driveway rights-of-way. A recent survey by the ALTA indicates that about 25 percent of all US titles require some curative action. (According to Nelson R. Lipshutz, in a personal communication to the author).

¹³ There is still a possibility that there may be a gap in coverage between the date of closing and that of issuance of the policy (Gosdin, 1999), but this has been much reduced for residential transactions (Palomar, 2000, pp. 4-10 to 4-13).

The two main types of policy are those which insure owners and lenders. The owner's policy generally covers an amount equal to the purchase price. This means that, if the title is defeated, compensation does not usually cover any capital gains on the property. Increased coverage for inflation is now included in residential policies and may be added to commercial policies. The premium is paid only once and the policy covers both the purchaser and his heirs in perpetuity, as long as they maintain a right or obligation over the property, even after it has been sold. This is specially applicable to warranties given when selling the property, so that in practice title insurance includes warranty insurance. The lender's policy covers the amount of the mortgage loan and therefore, as the loan is paid off, coverage is reduced until it expires altogether. It can be assigned to subsequent holders of the same loan.

With each sale, a new policy for the updated value of the property must be issued, mainly aiming to cover against acts of the last owner. The reissue rate for this new insurance usually includes a discount when the insurer is also in charge of examining the title, closing the operation and selling the policy. In successive transactions carried out by different insurance companies, a chain of liabilities is set up in which each insurer protects his insured party and any heirs, even after the property has been sold. Thus, after paying for any loss sustained by the insured party, his rights are automatically transferred to the insurer, who uses them to claim against the person who transmitted the property with a warranty deed and against the latter's insurer.

Premiums differ substantially across states. They usually increase in a lower proportion than the amount insured. According to a 1997 survey, for a property valued at 50,000 US dollars, the owner's policy costs on average 3.55 per thousand, but this falls to 2.44 per thousand for properties valued at one million dollars.¹⁴ The percentages are slightly lower for lender's policies (Table 2). These premiums do not include the costs of search (estimated between \$192.72 and \$519.03), closing services and document preparation. These figures are consistent with those given by several writers, who estimate the average premium at 3.5 per

¹⁴ These estimates were obtained from an ordinary least squares regression model with 14 dummy variables for each amount level, kind of policy and search inclusion, using the data given in Boackle (1997). All coefficients in the model are statistically significant at a confidence level higher than 97.2%; $R^2_{adj} = 0.8751$; $N = 484$.

thousand for the owner's policy and 2.5 per thousand for the lenders' policy.¹⁵ It has been claimed that premiums have recently been increasing (Burke, 2000, p. 1-12).

In addition to the exceptions included in each specific policy concerning any risks which were discovered in the title search and which have not been eliminated, policies usually have more general exclusions. Standard policies, as drawn up by the American Land Title Association,¹⁶ exclude the following general risks, amongst others: public land use regulation, especially environmental and zoning regulations; eminent domain that is not on record at the date of policy; any matters created, suffered, assumed or agreed to by the insured claimant as well as those known by him before the company issues the policy; defects causing no loss or damage; defects subsequent to the date of policy; and gratuitously transferred interests. Policies also include preprinted general exceptions concerning certain title problems. The most frequent are rights and claims of parties in unrecorded possession, any defects that would have been disclosed by an accurate survey, easements that cannot be discovered by searching the public records, unrecorded mechanics' lien, and taxes due that do not yet constitute a lien. Extended coverage may be added, at an extra premium, as endorsements to the standard coverage of the policy for a variety of additional risks. These are associated with restrictive covenants, zoning, street improvement assessments, changes in development plans, condominiums, variable-rate mortgages, encumbrances related to environmental protection easements, etc.¹⁷

¹⁵ See Johnson (1966, p. 393), Ford (1982, p. 304), Bostick (1987, p. 63) and Vargas (1994, p. 95).

¹⁶ Since 1929, the industry has gradually adopted a series of standard policies and coverage, thus meeting the demand of mortgagees and other secondary financial intermediaries who needed policies to be standardized on a nationwide basis. The American Land Title Association has also drawn up standard clauses for endorsements. See Palomar (2000, chapters 6 and 7) and Burke (2000, chapter 4). Some examples of updated versions are posted at <http://www.alta.org> (accessed 18 September 2001). Many states have also their own forms of policies, tested in the courts.

¹⁷ See Palomar (2000, chapter 9) and Burke (2000, chapter 10). There is, however, some doubt as to whether these extensions are in fact providing specific, costly coverage for risks previously covered by the insurer's general 'duty to defend' the title of the insured.

2. Title insurance outside the United States

2.1. Aims and achievements

Title insurance has been developed almost solely in the United States. There, it has not only spread risks but has also provided a degree of assurance that is not forthcoming from public institutions. It is therefore understandable that the insurance sector in the US has great faith in the efficiency of the system and in the possibility of transplanting the model to other countries. It is possible to read, for example, “It is America’s destiny to deliver some of its best attributes to a needy world. One of these is the American method of real estate conveyance. The title industry and its associated services.... In short, the American Title Insurance process is arguably the most efficient and cost-effective in the world” (Hick, 1998). In a similar vein, the trade association affirms that “America is home to the most efficient land transfer system in the world”.¹⁸ Those introducing it into the European market are equally enthusiastic about the size of the potential market. “The scope of the business is virtually unlimited and the depth of the market rivals that of the U.S. Title insurance in Europe will become a multi-billion euro business within the next ten years and, if present trends are accurate, probably much sooner” (L&E, 2000, p. 22). The subject is also of importance in the debate on the establishment of reliable systems for property law in developing and former socialist countries. Some authors advocate the use of title insurance in Russia, claiming that the situation there is very similar to that of the United States in the 19th century.¹⁹

However, it is not yet clear that US insurers are right in having such great expectations. On the one hand, their international presence is limited. As shown in Table 3, this is small because of both limited geographical coverage and investment. Companies tend to be present only in regions whose economies are closely connected to the US, such as Canada, Puerto

¹⁸ Quoted from the web site of the American Land Title Association (“The American Land Title Association: Putting People in Homes with Confidence,” <http://www.alta.org/store/catalog/index.htm> [accessed June 2, 2001]).

¹⁹ For example, Jaffee and Kaganova (1996, 2001).

Rico and the Pacific islands. Outside these areas, insurance companies are mostly just starting out or else work through agents and from offices in other countries. Moreover, much of their international business serves to meet the demand of US individuals and entities investing in foreign countries.²⁰ Being unfamiliar with foreign systems, they tend to demand title insurance to reach their usual level of security. Understandably, the initial problem for title insurers is to design the policies and to price the risk correctly, given that they are also unfamiliar with foreign markets.

In addition, insurers show different levels of adaptation to different markets. In countries where they have direct operations, they usually sell policies tailored to the specific risks faced by investors in that market, covering those risks that insurers consider commercially acceptable. These country-specific policies are usually governed by local law and are subject to the jurisdiction of the local courts of each country. Other markets are served from headquarters or from other foreign offices. When the demand is small, operations are considered on a transaction-by-transaction basis. If there is substantial demand, some insurers sell an ‘international’ policy after performing a due diligence examination of the general risks faced in that market.

These international policies provide less coverage than the standard policies sold in the US.²¹ They have limited use in the applicable jurisdictions, as they exclude risks that would

²⁰ Whenever they have begun operations outside the United States, this seems to have been the general trend. See, for example, the cases of the United Kingdom (Oetking, 1974) and Canada (Melnitzer, 1999). In a similar way, the original business in Southern Europe focused on insuring the purchases of British expatriates buying homes on the Mediterranean coast.

²¹ For instance, when compared with the ALTA 1992 standard loan policy, none of the three main standard international loan policies insures against the ‘unmarketability’ of title, unrecorded mechanic’s liens and some claims connected to bankruptcy or creditor’s rights laws. Nor do most of them cover the invalidity or unenforceability of assignment of mortgages (this is particularly striking since mortgage securitization is often claimed to be a driving force behind the evolution of the market), and they specifically exclude risks related to government police power, even if recorded, aboriginals’ rights, claims arising from war or similar and water and mineral rights. Some of the general international policies and specific country policies usually make explicit the coverage or exclusion of some additional risks—e.g. the possibility that land may be affected by revolutionary *ejido* rights in Mexico. However, some explicit inclusions may play an ambiguous role in terms of coverage when they contemplate particular instances of more general title defects: an itemized policy may offer less coverage than another one insuring all risks except those explicitly excepted. Also most country-specific policies are either for residences or for lenders only, which makes some of the additional covered risks negligible. See §21.04 in Palomar’s *Title Insurance Law* (June 2002 Supplement) for an analysis of title insurance policies available as of the year 2002.

require cover (crucially, all sorts of legal interests that have legal force *in rem* despite being unrecorded—the so-called ‘overriding interests’—are typically excepted), and cover other risks in terms that are too vague and are often written for a different jurisdiction. It seems that, lacking knowledge about which risks are insurable, which are the efficient clauses and which are the reasonable prices, insurers opt for excluding hard-to-ascertain risks. It is, therefore, doubtful if they provide the insured with a reasonable expectation of cover or, instead, lull them into a false sense of security. Certainly, writing specific policies is costly, and incentives to innovate in their design are hindered by the possibility of imitation.²²

On top of limited coverage, international policies seem to be designed for firms investing in foreign markets, given that their governing law and venues are those of the country of origin (the US, except for international policies sold from Canada and the UK) rather than the country where the property is located.²³ This focus on transnational clients raises some doubts as to the prospects of these policies. First, an expansion of international title insurance was to be expected as a consequence of the current globalization of the economy. This is so because globalization increases the number of parties buying property in foreign countries for the first time. The needs of these clients have little to do with a greater demand for insurance by nationals in their own countries, however. Transnational demand also constitutes a weak basis for future development of the sector. Such demand may be only temporary, being linked to development of international trade and, for countries with reliable registration systems, lack of experience in first-time investors.²⁴

Indirectly, the fact that investors demand additional security when buying real estate in unfamiliar markets also makes the sparse international presence of US insurers more revealing because it should have been easy for them to sell title insurance to US multinationals during their international expansion in the 1950s and 1960s and to use such sales as bridgeheads for further advances in foreign markets. In addition, the limited development of title insurance is also surprising if we consider that the securitization of

²² A hint of this incentive problem is that even the current international policy of First American has now been copyrighted for the first time in the industry.

²³ The insurer will defend the title in the country where the property is located, however.

²⁴ This kind of demand was so marked that in the 1990s some companies, notably First American, altered their commercial strategy in foreign countries, placing the emphasis not so much on additional security as on the speed and simplicity of real estate transactions when

mortgage loans, essentially a US invention, played an important part in the development of title insurance in the US. This poor degree of international development of US title insurers also contrasts with that of other service providers, such as commercial property brokers, law firms or financial auditors.

Finally, attempts to sell insurance in the former socialist countries have found limited success, perhaps because the obstacles to proper functioning of their registers are the same as those that stand in the way of title insurance. Based on the analysis given above, it is debatable whether there is any real similarity between, for example, Russia today and the United States of the 19th century. In order for both land registration and title insurance to function correctly, clear laws and a competent judicial system are required. Title insurance did not arise in the US to make up for the absence of laws or the shortcomings of courts but, as stated above, to complement the errors and omissions insurance of conveyancers.²⁵ Possibly, a condition for title insurance to be sold at an acceptable price and for a market in title insurance to develop is that both the recording of deeds and the courts must function properly—with recording setting the priority of titles and the courts resolving title conflicts in a reliable manner.²⁶

2.2. Two revealing cases: Canada and Puerto Rico

Before assessing the possible role of title insurance in countries with effective land registration, it is worthwhile observing the interaction between title insurance and the two main types of land registration in Canada and Puerto Rico.

Title insurance has been available in Canada since 1956 and has been used mostly in the Ontario region around Toronto. In this area, before most conveyances, lawyers traditionally

covered by title insurance (Grifferty, 1999). For an example of the promotional arguments used to sell title insurance to this kind of investors, see Murdock (2000).

²⁵ With the possible exception of the West coast, where titles suffered from the clouds relating to Mexican land grants and squatters' rights. However, even there, insurers could soon rely on an independent judiciary to resolve any conflicts.

²⁶ These conditions would make the development of title insurance much harder than that of, for instance, car insurance. Dependable conveyance services may also be necessary, but these could be provided in conjunction with title insurance by integrating both functions, as argued below.

issued title opinions based on the evidence provided by the public registers. Until the 1990s, title insurance policies similar to those in the United States were only used to meet the demands of US companies for speed and security. Since then, however, US insurance companies led by First American have gradually established insurance in the place of the lawyer's report in ordinary residential transactions. By 1999, most banks were prepared to accept title insurance instead of the lawyer's opinion for routine transactions. Some of them even offer title insurance as one of their refinancing services to obviate the need for a lawyer.²⁷

The reaction of Canadian lawyers is illuminating. Since 1997, they have been offering their own title insurance. Sold under the name of 'TitlePLUS', this product is a complementary insurance promoted by Lawyers Professional Indemnity Co. (LPIC), the liability insurance company owned by the governing body of the legal profession in Ontario, *The Law Society of Upper Canada*. TitlePLUS complements liability insurance by providing no-fault errors and omissions insurance. This has two main advantages. For the customer, it covers more risks than the insurance imported from the US, such as utility arrears, tax arrears and zoning.²⁸ For the lawyers, it allows them to compete with insurance companies because the latter's policies allow the insurer to subrogate against a lawyer who gives a defective title report and whose professional liability is insured by the LPIC as a monopoly (O'Donnell, 1997).

On the other hand, Puerto Rico has a register of rights that purges any title defect before registration. Before 1914, registrars were paid with a residual, as they are today in France or Spain. Since then, they have been paid on a fixed salary basis. Probably as a consequence of this change in compensation, the register suffers considerable delays. After documents have been lodged (and have, therefore, gained priority) they still wait for years for the registrar's review and eventual registration, when a few weeks is usual in functional systems. Insurance companies have stepped in to cover the risk during the period between lodgment and

²⁷ On the evolution of title insurance in Canada, see Troister and Waters (1996), McKenna (1998, 1999a, 1999b) and Melnitzer (1999). It is revealing that the demand for title insurance caught on only when the policies started to be marketed as insurance covering the closing process instead of the condition of record title (Rush, 1997). A similar phenomenon started in Australia in 2001 (see note 44 below).

²⁸ See "TitlePLUS: The Future of Residential Conveyancing" (<http://www.titleplus.ca> [accessed June 2, 2001]).

registration, mainly to meet the demand for security of investors in the US secondary mortgage market.

2.3. Title insurance in Europe

In the United Kingdom, several forms of title insurance have existed for centuries. First, third party eviction warranties have occasionally been provided. Second, mortgage guarantee insurance has been used to insure creditors against the risk of the value of the property falling below that of the debt. Thirdly and closer to real title insurance, defective title insurance has commonly been used when defects in titles are discovered, usually as a result of long-standing errors and lost deeds.²⁹ This is similar to the above-mentioned practice of US insurers charging an extra premium to bear the risk of a minor title defect on a casualty basis. The demand for defective title insurance has increased gradually in line with new standards required in transfers of title in which title quality is questioned, not always justifiably. The market seems to have been developing faster since the real estate crisis of the mid-1980s, which led many banks to sue solicitors and valuers for negligence in cases of transactions that ended in insolvency.

More recently, a fourth type of insurance that insures against unknown defects is being sold by three companies, two of them subsidiaries of large US title insurers. The risks covered in the UK by what are in effect title insurance policies, are the following: “confusion from similarity of names; forged or missing documents; signatures of minors or mentally incompetent persons; signatures made under duress; mistakes in recording legal documents; undisclosed or missing legal documents; undisclosed or missing heirs; fraud; invalid divorces; misrepresentation of marital status; unpaid taxes; clerical errors in public records; wills not probated; erroneous searches; inadequate rights of access; inaccurate boundary descriptions; voidable or invalid deeds” (Pratt, 1988, p. 24). It is claimed that title insurance is less costly

²⁹ See, for instance, Cribbet (1975, p. 309). Prices of defective title insurance in England depend upon the nature of the defect. Countrywide, which is associated with the Law Society, provides as a guide the following rates: for lost title deeds, 0.125%; for possessory title, 0.20%; for adverse possession, from 0.35% to 0.50%. Actual rates depend upon the perceived level of risk. There is also a minimum premium of £120 and discounts for limits of indemnity

and makes defective title insurance unnecessary (Webster, 1999b), although both claims seem doubtful. If there are real price differences, these are probably due to the fact that defective insurance is contracted for a risk that is already known. Doubts have also been expressed on the effective coverage afforded by title insurance (Swarbrick, 2001).

The leading provider of title insurance in the UK, London and European (L&E),³⁰ is also pioneering the sale of title insurance in France and Spain. It began by only dealing with British customers purchasing property on the Mediterranean coast but is now distributing title insurance in both local markets through financial institutions and real estate developers. The insurance covers only residential land and buildings, excluding all types of rural or commercial property.³¹

in excess of £1m (http://www.countrywidelegal.co.uk/technical_briefs/DTI.html [accessed September 18, 2001]).

³⁰ L&E is the main title agent in Europe, with subsidiaries in the France, Spain and the United Kingdom. It was created in 1994, its sales volume is still modest (€9.36m in 2000) and it insures and reinsures risks with larger insurance entities (Lloyds, AXA and Génesis MetLife). In July 1998 it was bought up by the US Frontier Insurance Group, a ‘niche insurer’ which did not sell title insurance in the US. Frontier went into serious, though unrelated, financial difficulties and sold L&E in May 2 2001 for around \$5m to the French April Group. This describes itself as a ‘designer of insurance services’ specializing in the ‘design and administration of policies and assistance with distribution’ (“The Little Big Firm,” <http://www.aprilgroup.com/wenapg01/accueil.asp> [accessed June 2, 2001]).

³¹ See Arruñada (2001) for a summary of the coverage that the insurer offered in France and intended to provide in Spain. The coverage given in Spain is defined as a closed list of events and emphasizes negative registration decisions (Génesis Metlife, 2001).

3. Functions and prospects for title insurance in Europe

3.1. Demand and supply

Comparative analysis of land titling systems suggests that title insurance is most appropriate under deed recording.³² This is especially the case when the deficiencies of the register—mainly the lack of tract indexes—do not allow for the production of good title reports and when insufficient guarantees are offered by those issuing the title report. The empirical evidence confirms this general hypothesis in that title insurance was developed and took root in the United States where both of these conditions apply.

However, even in jurisdictions based on registration of rights, there might be potential demand for title insurance, either because of insecure conveyance or ineffective registration. Even though European public registers generate fewer errors than those in the US and in almost all countries they not only file documents but also ascertain, purge and establish rights, there may be a substantial unsatisfied demand for security, of both the legal and economic kind, for several reasons. First, the liability of conveyancers, including notaries public even in some countries where they enjoy a professional monopoly,³³ is often limited to negligent conduct and, in most countries, is difficult to enforce. Second, the existing systems follow behind demand because they adapt too slowly for today's economy. New types of risk are often left uncovered and outside the registration system for many years. Also, some jurisdictions continue enforcing many unregistered rights (overriding interests, either possessory or tacit mortgages) as rights *in rem*.

The potential market for title insurance in Europe is, however, smaller than that in the United States.³⁴ One of the main reasons for this is the apparent lack of demand for additional

³² See Arruñada (2002).

³³ For an economic analysis of the role of notaries public in Civil Law countries with land registration, see Arruñada (1996).

³⁴ In the UK, the volume of premiums has been estimated at €400 million (Webster, 1999a). In Spain, the estimate stands at only €100 million, with breakeven at only 6,000 policies (L&E, 2001b). When these figures are compared with the €6,500 million in revenue earned

title security from the secondary mortgage market. Based on experience in the US, it is considered in the sector that the potential development of a secondary mortgage market on a Europe-wide scale would involve a marked increase in the demand for title insurance (L&E, 2000, p. 7). However, the expansion of title insurance is unlikely to benefit from this development—if it ever happens—to the extent that it did in the US. This is due to differences in both supply and demand. With respect to available supply, the degree of standardization and security of European public registers is probably much greater than that of US deed recording offices.³⁵ Revealingly, insecurity concerning property titles is *not* one of the causes given by experts for the limited development of mortgage securitization in Europe.³⁶ With respect to demand, European financial intermediaries are larger and are therefore better placed than those in the US to self insure these risks. Even in the United States, some banks are beginning to self-insure the mortgages they sell in the secondary market.³⁷ This phenomenon seems related to the increase in the concentration and size of participants in the financial market, which reinforces the argument.

Whatever the extent of the demand for title insurance in Europe, its nature will inevitably be very different from that in the US, where the information provided by many registers is so unreliable that, even if a careful study is made, a substantial number of defects remains. Most European countries have registers of rights and, even where deed recording is used, records are better organized than in the US. Moreover, the closing of transactions is the preserve of notaries in most European countries, and in Belgium and France this is also the case for the production of title searches. For standard transactions, additional examination of title is probably fruitless.

and the €350 million in losses paid by title insurers in the US in 1994, it seems clear that even those promoting title insurance in Europe do not expect it to play more than a secondary role, which is in line with its casualty basis.

³⁵ This is true not only for the majority of countries with registers of rights but even for systems such as French deed recording, which has been using tract indexes and applying the principle of ‘preliminary entry’ that forbids recording a deed if the grantor’s title is not recorded. Most US deed recorders have only recently become able to provide information on a tract basis, thanks to computerization.

³⁶ See, for instance, Diamond and Lea (1992, pp. 26-28, 56-60 and 131-34); the works collected in Lea (1998); Batchvarov, Rajendra and De Pauw (2001, pp. 758-63); and Mozilo (2001).

³⁷ See experiences described in Palomar (2000, pp. 1-12 to 1-13), Britt (1995), Hartle (1998) and *National Mortgage News* (vol. 23, no. 12, December 7, 1998, p. 15).

Title insurance is therefore limited to a complementary role, making up for deficiencies in the economic security of the current systems. The next sections test the consistency of this analysis, showing, first, that European policies are mostly issued on a casualty basis. In addition, insurers may act as enforcers of professional liability. Finally, integration of closing activities is plausible, but would require further liberalization of the monopoly currently enjoyed by notaries public.

3.2. Casualty insurance

In the terms used in section 1.2, it is *title insurance*, rather than *title assurance*, that is being sold in Europe. Neither the agents nor the insurers in Europe carry out searches, issue title reports, or create or operate title plants, due to the availability of land title registration.

As a consequence, a main difference between title insurance in Europe and the US is that in Europe it functions more on an actuarial or casualty basis. Several empirical indications are consistent with this emphasis on casualty insurance. First, expected percentage losses are higher than in the US. Data on the leading British insurance company corroborate this because the percentage paid in losses is higher than that for US insurance companies. L&E (2000, pp. 19-20) forecasts losses amounting to 10.5 per cent of revenue, higher than the average for the US (6.6 per cent between 1968 and 1994).³⁸ Second, agent's fees are smaller. L&E, which in US terms acts as a title agent and not as a title insurer, plans to charge a fee (in Spain, 40 per cent) which is much lower than the usual fee paid to agents in the US (between 75 and 85 per

³⁸ Obviously, UK data cover too limited a period to establish this ratio definitely, because there is no indication of the proportion of losses that can be recovered. On the one hand, the US experience indicates that the volume of losses will be greater in the UK, considering that in the US most title losses take place during the first five to seven years of life of the policies (A.M. Best, 2000, p. 12) and that most policies issued in the UK are still very young so may still give rise to a large volume of additional losses. Furthermore, the L&E estimates for the US may be too optimistic. Loss tails in the US may run to 20 years with probably 20% of losses occurring after 10 years, according to Nelson R. Lipshutz, in a personal communication to the author. On the other hand, it is also possible that the greater level of losses is related to the fact that the UK is a new market. If so, there should be fewer losses in the future as insurers improve their processes of risk selection.

cent³⁹). Third, some firms aim to achieve full loss recovery and expect to earn lower commissions than US title agents. Together with simplifying the marketing effort, this may help in explaining why the premium charged by L&E is the same for all policies, whatever the value insured (L&E, 2001a, p. 13).⁴⁰ It is also consistent with the conjecture that its policies will mostly serve to complement and perhaps enforce the liability of the professionals involved in conveyances.

Because of this casualty basis, title insurance in Europe offers a very different service from that provided in the US. In America, it performs a preventive function, offering legal security a priori, because the title search and the title report lead to the removal of title clouds. However, in Europe the insurance only provides economic security a posteriori. Most of the costs in Europe are expected to be incurred in negotiating and defending claims ex post, instead of avoiding their occurrence by ex ante prevention.

The viability of insuring titles on a casualty basis has been questioned in the United States. For example, Lipshutz (1994, pp. 73-75) gives three reasons why it would not be viable there: the need for clearly establishing which risks are excluded and which are covered by the policy, the fact that the public demands legal security (a clean title) and not just economic security (compensation against claims), and the need for preventing adverse selection of the worst risks.

In Europe, the larger (and, for the most part, mandatory) involvement of lawyers and the fact that registers are better organized probably make the first two of these reasons less important. On the one hand, both the deed and the register describe property rights more faithfully, so it is not necessary for the insurer to carry out an additional search to define

³⁹ According to L&E (2000, p. 33). Other authors place the commissions of US agents at between 50 and 90 per cent, depending on their functions (Ford, 1982, p. 300). It is not clear that these two sets of figures are comparable.

⁴⁰ Troister and Waters (1996, p. 94) mention a similar pricing pattern in Ontario, where policies for residential purchases valued at up to \$500,000 were priced at \$250.00. The reasoning behind this loss recovery and pricing strategy is dubious, however. On the one hand, resources will have to be allocated selectively if the insurer wants to avoid the worst risks. On the other, litigation costs will vary substantially with the amounts of the specific loss, and these costs will not always be recovered, especially in cases of fraud. The evidence of the US confirms these doubts. There, it is considered that insurers incur considerable risks when they enter new geographical markets. Since they have to develop a new network of agents in a short time, they tend to suffer from adverse selection and therefore run a greater risk of defalcation (Richards, 1998). The situation is unlikely to be any different in Europe.

coverage. In addition, the European systems already provide a much higher degree of legal security, especially in countries with registers of rights, which are the vast majority.

Adverse selection may be more difficult to avoid in Europe, however. Certainly, other agents remove or bear much of the risk of adverse selection. For example, when a mortgage is insured in the US the insurer has to check that there are no other prior mortgages. In Europe, this task is carried out for all transactions by other agents, mainly by the registers of rights. The insurer can therefore issue the policy in the expectation that, if a claim is made, it will be able to recover any loss because the State, the register or the registrar will be liable (or the notary public in the minority of countries, such as France, which record deeds instead of registering rights).⁴¹ However, the lack of a prior title search by the insurer and the fact that there is not a general demand for this service both mean that European insurers may still suffer substantial adverse selection. This explains why they prefer to sell their policies in connection with some other transaction (home sales and mortgages) and through the large party to this transaction (real estate developers and banks). Their focus on foreign investors is also likely to reduce the adverse selection problem. All in all, it remains to be seen if this strategy is sufficient, especially to avoid fraud.

3.3. The effects of a more demanding liability regime

When insurers do not issue title reports, as in Europe, their role is limited to complementing the professional liability of those who issue reports and clear titles. In a sense, rather than insuring titles, they are insuring liabilities or improving professional liability insurance, in two directions. On the one hand, insurance against negligence becomes no-fault error and omissions insurance. On the other, the insurer enforces the professional liability of those involved in the real estate process (developers, agents, notaries public, registrars, etc.), as it provides legal aid insurance.

This stricter enforcement can be expected to modify the incentives of these participants, encouraging the introduction of reforms and new services.

⁴¹ Unlike US recorders, European registers are subject to strict liability which even holds registrars personally liable in France and Spain.

First, more diligent professional practice can be expected, to the extent that insurance makes the current system of professional liability more effective. It is generally believed that there is now a certain proportion of claims in which, although one of the professionals may have incurred a liability, no claim is made against him. The specialization provided by the insurance company greatly alters incentives in this respect and companies can be expected to enforce all liability, even if it is only to build up a solid reputation as negotiators to facilitate the reaching of agreements in the future.⁴²

Second, the introduction of this type of insurance is likely to extend the degree of security—both legal and economic—currently provided.⁴³ With regard to legal security, potential improvements could easily be introduced in closing, as well as in registration of both deeds and rights varieties (mainly by improving identification techniques, eliminating time gaps and avoiding delays). With regard to economic security, liability could be extended and enforcement mechanisms made more effective. In this area, demand seems to favour strict liability, compensating the user even when the professionals have not shown negligence. The extension of professional liability for conveyancers in Canada and, incipiently, Australia provides interesting examples.⁴⁴

⁴² US title insurers follow different strategies for managing their claims. Some of them prefer to settle claims early, while others prefer to incur the expenses of litigation in order to maintain a reputation that hopefully deters future fraud and nuisance claims (A.M. Best, p. 12).

⁴³ Some US authors argue that most registers of rights do not fully indemnify the damages they cause (see, for example, Hick, 1998). It is likely, however, that these registers have fewer failures and, at the same time, these fewer existing failures are not well covered.

⁴⁴ In addition to the TitlePLUS policy created by Ontario lawyers, described in Section 2.2, the law societies in the Western provinces of Canada have opted for extending the coverage of their liability regimes with the introduction, in February 2001, of the Western Provinces Conveyancing Protocol. As a response to title insurance, their professional insurance covers survey risk in residential mortgage transactions on a casualty basis for those institutional lenders which have agreed to follow the Protocol. In Alberta, Saskatchewan and Manitoba, where a substantial registration gap made bridge financing necessary, lawyers' opinions now allow for the release of funds at the time of submission of mortgage documents for registration (The Law Society of British Columbia, 2001). Events in Australia in 2001-2002 are similar to those in Canada. The Australian subsidiary of First American started offering a policy and process for re-finances which eliminated the gap between the signature of the mortgage by borrowers and settlement. This gap was risky because errors could result in non-registration of the mortgage. Lawyers have reacted by trying to contract a policy that would provide an easy way for lenders to recover in the event of errors made by their lawyers without having to prove negligence.

3.4. Possibilities of vertical integration

The casualty nature of the title insurance sold in Europe could be just a temporary attribute. After all, it also arose in the United States to complement the professional liability of conveyancers and lawyers who were involved in transactions or issued title reports, but insurers later began to take on their functions, from title search to closing services. Something similar occurred in Canada where it started out as a complement for professional liability and eventually made the lawyer's report unnecessary in routine transactions.

In these countries, there has been a long-standing trend towards vertical integration, both upstream and downstream. US insurers now issue title reports (at least internally) and prepare the documents for closing. But also some US and many Canadian lawyers sell insurance policies that cover no-fault errors and omissions. This trend seems to indicate that it is efficient for the party that produces the relevant information on the title and closes the transaction to be part of the same organization that insures both.⁴⁵

The different degree of integration between the insurer and the other participants implies different governance structures and jurisdictions for their relationships. In a more integrated structure, resources are coordinated by fiat and conflicts between the issuer of the title reports and the insurer are mostly resolved within the internal jurisdiction of the company or the franchise network. The structure of incentives may be similar but, with greater integration, they become easier to manage and are generally weaker.

In Europe, most lawyers potentially affected by vertical integration would be notaries public. Title insurance will thus start out being fully disintegrated, and litigation against notaries will probably be a main outcome. The incentives would be established in litigation and settlement of claims rather than managed within an organization. To the extent that this disintegrated formula is inefficient (which seems likely considering the trends in North America), some form of integration might develop in the long run. This could take the form of

⁴⁵ Policies sold in Australia are being promoted as 'Process insurance' rather than 'Title insurance' and the insurer has been reluctant to allow lawyers and conveyancers to use their own processes and simply provide the policy. In some instances, they have been required to re-brand their mortgage processing businesses including the 'First Title' name. This quasi-integration of conveyance intermediaries hints to a strategy of avoiding title insurance of a purely casualty nature. It also fits well into the evolution in other markets (see note 27).

insurers integrating notaries or, less radically, notaries providing insurance against their no-fault errors and omissions.

The possibility of insurers preparing documents and providing closing services is not viable for the moment in countries where the intervention of a notary public is mandatory. However, there is increasing pressure towards deregulation of this intervention by notaries, at least in standard transactions (such as certain electronic transactions). Experience in the United States and Canada also points towards reduction of the notaries' monopoly. If notaries do not extend the coverage of their liability, a scenario of increasing litigation would probably speed up this move towards deregulation. And when deregulation actually takes place, it is likely to bring with it greater integration in both directions—notaries would improve their liability, and insurers would be more involved in closings.

The conclusion is necessarily different for the potential search activities of insurers. Almost all European countries have registers of rights that examine each transaction and provide a legal and unambiguous definition of most rights to real property. Private search consists only of applying for a title certificate from the register and opinions of title are unnecessary for standard transactions. The case of Puerto Rico, covered in Section 2.2, warns of a situation that could modify this, namely, when the registration of rights takes so long that in effect it acts as a register of deeds. Furthermore, integration of the public register itself is not possible because registers carry out legal functions which affect the rights of third parties (Arruñada, 2002). This is applicable not only to the register of rights. Recorders of deeds cannot be integrated either, as shown by the evidence of the US where private title plants only perform a private function. Registers with legal effects essentially perform a judicial function so are always public—even when, as in the US, these effects are only the establishment of priority.

4. Summary and conclusion

Title insurance indemnifies the holder of a right in real property for losses caused by title defects that exist but are unknown at the date of policy. It appeared in the US in the last third

of the 19th century, to complement the personal liability and the errors and omissions insurance of professionals examining title quality.

Being a residual claimant, the insurer is strongly motivated to search the available evidence for any title defect before issuing the policy (risk screening). Defects discovered in the search are either excluded from coverage or purged. The insurer is also motivated to ensure that a correct settlement of the transaction takes place (risk avoidance). In the US, these forces have led title insurers to vertically integrate all kinds of title examination and settlement services. They also explain why only a minor part of the industry's revenue (around seven percent) is spent in compensating losses to policyholders (risk spreading).

Outside the US, title insurance has mainly been sold to US investors operating in foreign and unfamiliar markets. Policies sold recently outside the US come closer to its origins, as insurers do not examine the quality of individual titles and do not build title plants. They rely, instead, on the functioning of the land registers and the work of solicitors and notaries. In particular, land registration makes private title plants unnecessary. Instead of producing additional information on title quality, as in the US, title insurers issue their policies on a casualty basis.

When structured this way, title insurance merely complements and enforces the professional liability of professionals involved in real estate transactions. Its future development faces several uncertainties. First, the ability of insurers to avoid adverse selection without individual screening. Second, the willingness of professionals, particularly notaries and solicitors, to adopt strict liability standards, making casualty title insurance redundant. Third, the capability of the current conveyance and registration systems to close the remaining gaps in security. Fourth, the proven capacity of large banks to self-insure existing title risks, thus reducing institutional demand.

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Table 1. Compensation and operating costs in several kinds of insurance in the United States

<i>Sector</i>	<i>Average 1968-1994^a</i>		<i>Average 1989-1999^b</i>	
	<i>Losses / Operating Revenue (%)</i>	<i>Operating Expenses / Operating Revenue (%)</i>	<i>Losses / Operating Revenue (%)</i>	<i>Operating Expenses / Operating Revenue (%)</i>
Title insurance	6.6	90.1	7.2	92.3
Boiler & machinery, stock	40.0	54.9	50.3	46.7
Surety, stock	44.3	49.6	29.4	45.9
Property and casualty, mutual	76.2	28.7	81.5	23.1
Property and casualty, stock	79.2	22.7	79.0	28.4

Sources: ^a ALTA (1996, p. 18), ^b A.M. Best (2000, p. 9).

Table 2. Estimated premium for title insurance policies in the US circa 1997

			<i>Coverage (\$)</i>				
			<i>50.000</i>	<i>100.000</i>	<i>200.000</i>	<i>500.000</i>	<i>1.000.000</i>
Risk premiums	Owner policies	in \$	177.43	348.57	593.98	1,342.93	2,444.48
		per \$000	3.55	3.48	2.96	2.68	2.44
	Lender policies	in \$	147.40	283.11	504.04	1,149.21	2,099.30
		per \$000	2.95	2.83	2.52	2.30	2.10
Estimated search cost			192.72	230.11	248.74	372.37	519.03

Source: Calculated by the author using a statistical regression model built from the data given in Boackle (1997).

Table 3. The international presence of the six main title insurers plus L&E

	<i>Chicago Title and Trust Company</i>	<i>Fidelity National Title Insurance Company</i>	<i>First American Title Insurance Company</i>	<i>Land America Financial Group</i>	<i>London & European</i>	<i>Old Republic Title Company</i>	<i>Stewart Title Company</i>
Australia			***				
Bahamas		*	***				*
Belize							***
Canada	***		***	**			**
Costa Rica							**
Dominican Republic							**
England			***		***		**
France					***		
Guam and Marianas	*		***			**	
Ireland			**				
Israel				*			*
Korea			**				
Mexico	*			*			*
Poland							**
Puerto Rico	*	*	**			*	
Scotland			***				
Spain					**		
Virgin Islands	**	*	**				

Sources: Based on: (a) the data given in the companies' web sites, (b) press articles collected on the subject by the EBSCO information databases in February 2001, and (c) direct checking with representatives in all the companies.

Notes: (1) The asterisks indicate different types of presence in each country: (*) sales through agents or law firms or by agreement with a domestic insurance company; (**) sales through an office in the country; (***) sale through a subsidiary set up in the country. (2) The table covers the six main US insurance companies which account for approximately 90 per cent of the US market, according to NAIC data, plus London & European, which is included because of its important international presence although it does not insure titles in the US. (3) Separate data are given for Chicago Title, although it was bought by Fidelity in 1999, because its penetration has been very different to what is now its parent company.