Introduction

The Plan of the Book and What It Does Not Cover

A medical student buying a book on 'organ transplants' probably has a good sense of what he is spending his money on. Similarly, a law student venturing to buy a book on 'legal transplants' will have little difficulty finding out what he is in for.[1] Legal transplants are known to imply 'displacement. For the lawyer's purposes, the transfer is one that occurs across jurisdictions: there is something in a given jurisdiction that is not native to it and that has been brought there from another.'[2]We are addressing a similar form of displacement. However, while legal transplants are transferred 'across jurisdictions',[3] economic transplants[4] are relocated across disciplines. Naturally, they are 'not native'[5] to the law because they originate in a different discipline. But what is being transferred? It cannot be 'the moving of a [legal] rule [. . .] from one country to another, or from one people to another'.[6]Instead, we will address a variety of concepts being transplanted from the economist's to the legal world. Think about a court relying on a prediction how capital markets will react to disclosure of inside information, based on input from the world of theoretical modelling of market processes. Imagine an empirical study presented to the legislator, benchmarking the strength of your country's shareholder rights against numerous other countries. Consider a neo-institutionalist contributing an article to a law review where he describes the incentives determining the conduct of a CEO

[1] Legrand (1997); (2003); Watson (1993); (1995); (1996). [2] Legrand (1997:111).
[3] *Ibid*.
[4] The term has, to my knowledge, only been used by Lianos (2009a); (2009b). He describes 'analytical concepts, such as market power, barriers to entry, consumer welfare, efficiency gains' in a competition law context, *ibid.* p. 56. He distinguishes this use from 'economic authority', *ibid.* p. 61. The term in the way it is used here encompasses both.
[5] Legrand (1997:111).
[6] Watson (1993:21); Legrand (1997:112) more finely elaborates on this quote.

when going about his daily work. Imagine this work is later referred to in recitals of a European Directive or in a judicial opinion.

It is tempting to start our endeavour with a clear-cut definition of economic transplants and proceed from there towards the different manners in which they make their way into the legal world. Despite its initial appeal, we shall not go down this path. In lieu of a definition, we will for now offer a few illustrations of economic theories, studies, claims and simplified versions of these and show where they could fit into a legal pattern of argument, reasoning and law making. Only towards the end of the first part, having discussed details of economic and of legal methodology will we be in a position to frame the concept of economic transplants more precisely.

One phenomenon we will address as 'economic transplant' results from empirical scholarship involving legal rules, court decisions or entire legal families like the common and the civil law. Scholars code such data to allow for quantitative analysis and for comparative scoring assessments and deliver policy advice on that basis.[7] The much-scolded assumption of rational, preference-maximising actors on capital markets is a second example illustrating how an economic transplant may enter the legal world. In a recital of the Market Abuse Regulation (MAR)[8] we read that 'reasonable investors base their investment decisions on information already available to them, that is to say on *ex ante* available information'.[9]The European Court of Justice took this understanding further, assuming that

'reasonable investors base their investment decisions on *all* ex ante available information'.[10]

The court in this way arrived at a combination of legal and economic concepts which, as we shall see in the third part of this book, did not yield a result necessarily in line with what economic theory would have suggested.

A more theoretical, third example is provided by neo-institutionalist scholarship on, for instance, rules on management remuneration.

[7] Djankov et al. (2008); (2007); Ferreira/Kershaw/Kirchmaier/Schuster (2013); La Porta et al. (1998); (2006); Lele/Siems (2007:43).

[8] Regulation (EU) No. 596/2014 of the European Parliament and of the Council of 16 April 2014 on market abuse (market abuse regulation) and repealing Directive 2003/6/eC of the European Parliament and of the Council and Commission Directives 2003/124/EC, 2003/125/EC and 2004/72/EC, OJ L 173/1, 12.6.2014.

[9] Recital (14) MAR.

[10] European Court of Justice, *Markus Geltl v. Daimler AG*, C-19/11, 28 June 2012 (Geltl), para. 55, italics added by me.

According to mainstream insights of agency theory, interests of owners and shareholders of a stock corporation are not necessarily aligned. While owners would like to see management make the value of their stock rise and pay out dividends, it can often be expected to primarily focus on rent extraction for its own sake. Dispersed shareholders will typically find it costly to monitor managers efficiently. Being rationally apathetic, they will not provide adequate control of good corporate governance, so the argument runs. Still following agency theory, a simple policy advice commended itself to yield promising results. Interests will be aligned if management is to be paid in stock options. Managers will focus on rising stock prices so as to make the most of their options. Owners will profit, too. When the former profitably cash in their options, the latter enjoy more valuable stock, to sell or to keep. Legislation facilitating the introduction of stock option plans often endorsed this very basic economic transplant.[11]

The natural legal audience for economic transplants like these are law-making institutions.[12] Large-scale studies appear to offer insights which seem tested and proven in a 'scientific' manner. Such insights find their way from academic debate into policy advice delivered by scholars, think-tanks or lobbyists.[13] Preparatory legislative material may pick up on such guidance. A recital in a European directive may refer to it. Later, lawyers working with legislation issued in this way may propose their interpretation of what an economic study or an economic theory could contribute to a case at hand. Judges will have to be convinced by the argument that a certain economic objective is embedded in a statute applicable to a case put before the court. Along these lines, economic transplants may appear as building blocks of a legal argument and find their way into the legal world.

Economic transplants of this kind seem to come naturally to both legal scholars and economists working in the broader area of corporations and capital markets. One discipline delivers data, models and predictions on how markets and corporations work. The other starts from such evidence and works out suggestions for drafting legal rules accordingly.

It will be submitted here that economics' methods are in the politico-legal universe often perceived as those of a 'hard' science, delivering tested and 'objective' insight. Under this assumption, economic transplants promise measurable law making. This appeals especially to the

[11] For critique see *pars pro toto* Bebchuk/Fried (2004); Bebchuk/Fried (2010); Bebchuk (2010); Bebchuk/Spamann (2010).
[12] Heise (2002:849). In more detail: Goldsmith/Vermeule (2002). [13] Riles (2011).

European legislator, who not only is faced with dividing lines between national jurisdictions but, in addition, has come under pressure on account of its weak democratic accountability.

However, we propose that things are usually more complicated. Despite both disciplines seemingly speaking the same language, the research methods they employ differ fundamentally in many respects.[14] This leads to a number of challenges which any economic transplant faces. The lawyer's hope to receive 'objective' evidence from economists will often not play out. Communication across disciplines may face cultural problems. Watered down versions of economic theory will surface in political legislative proceedings. Judicial interpretation may give economic transplants a very different face than their role in economic theory suggests.

The book is divided into three parts.

The first part is devoted to the question which promises economic transplants may carry for the legal universe in the European Union. We will arrive at these promises by taking a detour. We focus first on an economist's and a lawyer's epistemic background. We find that law and economics often seem to address the same phenomenon which makes cooperation natural and attractive. However, while their research methodology was once similar and economics understood as belonging to 'political economy', today's scholarship differs substantially. The interest in law making for corporations and capital markets will allow a focus on the economics of finance, and the impact on past legislation to concentrate on formal modelling and empirical work. We review economics' path from its more verbal tradition to today's increasing 'mathematisation'. From there, we discuss why some social sciences have felt under pressure from a perceived economic 'imperialism'.

The law's methodology escapes this straightforward form of presentation. We describe it here as comprising both work being done from a participatory point of view 'inside' a legal system and observations of such work from an external point of view. In the course of contrasting these points of view we will also be in a position to pin down the concept of economic transplants more neatly. These occupy the area where legal work done from an 'internal point of view' overlaps with work being done from an 'external point of view'.

[14] See for an earlier version of this argument Langenbucher (2015b:317).

The first part concludes by taking a closer look at three promises economic transplants hold in store for a European legal audience:

First, they appear to provide tested predictions on how capital markets work and how the people acting on those behave.

Second, they offer help to 'strip away complexity'[15] by delivering a clear question and a precise methodology to work with. What appears as an intricate political or legal question can be reframed as a problem of economic theory.

Third, they offer a common language for lawyers from many different national backgrounds. Our interest lies primarily with the European legislator. It is suggested that economic transplants can, on the one hand, function as a meta-language in which to converse. Reaching an understanding across legal cultures, different national statutory rules and legal principles in the European Union is not only challenging for comparative legal scholarship. It also poses enormous hurdles for both political dialogue and legislative drafting at the level of the European Union and, later, at the level of Member States transposing European law. Economic transplants may provide standardised tools for those tasks. On the other hand, the promise of a common language might prove appealing for a different reason. European lawmakers and regulators are increasingly confronted with their lack of democratic accountability. Law making is seen as insufficiently linked to a political consensus reached across Member States, even less as produced through a common legal heritage uniting those states. Economic transplants do not pretend to depend on any of those narratives. Instead, they use the language of scientific credibility. Law making, then, does not appear as a struggle about intricate legal and political issues. Rather, it comes across as the attempt to transport tested economic findings into the law.

The second part of this book explores these promises through the lens of a legislator. We present formal modelling as a basis for predictions of what statutory rules can hope to achieve. For a legislator, the focus, naturally, is on understanding how a model may be mapped onto real-world problems. Next, we look at empirical work as an attempt to measure and describe reality and in this way deliver input for the legislator. We show why empirical research is especially relevant for a legislator faced with passing rules for the 'real world'. Having

[15] The term stems from Lazear (2000:99), describing why economics' methodology has proven successful in taking hold in other social sciences. There is more on this context in Chapter 2.

established which promises economic transplants hold in store for the legislator, we revisit each of these promises in turn.

The promise of measurability is presented in the context of regulatory impact assessments. These have been in use by international organisations and legislators around the world in an attempt to size up and appraise the effects of legal rules. Quantifying and comparing legal rules forms part of this effort. Hence, we hope to learn more about how this could be done, and which challenges it entails.

The promise to strip away complexity has been invoked by scholars promoting a legislative 'culture of experimentation.'[16] Alluding to the natural sciences' method, this seems like an interesting path to put economic transplants to good use in the context of law making. We contrast the suggestion to strive for legislative experimentation with legal methods 'from the inside'. Concerns are raised about the extent to which a 'culture of experimentation' fits in with the web-like feature of the law. This leads us to a further question. Clearly, the law depends on abstract legal terms and concepts. Is this the lawyer's way of 'stripping away complexity', done from an internal point of view? If so, how is it similar and how is it different from abstract economic assumptions? It is submitted here that the use of abstract legal terms does, in a sense, effectively allow stripping away complexity. At the same time, it opens itself up to embrace the complexity of individual cases, a task largely entrusted to the judiciary.

The promise of a common language is reviewed in the context of European law-making bodies. We acknowledge its role as a potentially useful meta-language. However, there are a number of challenges. Moving economic transplants from a scholarly world of expertise into the arena of political debate entails the risk of such transplants morphing into economic clichés. Simplified and taken out of context, economic transplants risk losing much of what makes them commendable. A flip side of this challenge is their being perceived as belonging to an exclusive domain of expert talk, requiring intense training, hence being inaccessible to political dialogue. This carries the potential of further deepening a lack of democratic accountability. The more political dialogue incorporates issues commonly perceived as technical and open to expert assessment only, the more we see them delegated. Instead of opening such questions up to (often cumbersome and lengthy) parliamentary debate, they are placed in the hands of (bureaucratic) specialists. Their

[16] Greenstone (2009:113); Sunstein (2011:1364).

superior technical knowledge seems appropriate when coupled with the understanding that what is at stake are problems allowing for a straightforward, 'scientifically tested' solution. Again, the world of corporations and capital markets illustrates this. It is the regulation of European securities markets which gave rise to the so-called 'Lamfalussy-process'[17]. This process allows for speeding up legislation by introducing different levels of law making. Only first-level legislation is carried out according to parliamentary procedures. Second-level legislation allows delegation of certain questions to the European Commission. Third-level legislation does the same for public agencies which are entrusted with the task of issuing principles, guidelines and lists of frequently asked questions.

The third part of this book explores the impact economic transplants may have on adjudication. At first glance, there seems not much to commend economic transplants to judges. The judiciary is presented as the paradigm legal actor taking an 'internal perspective'. His everyday tasks consist in using abstract legal terms and concepts to work towards embracing the complexity of the 'real world'. What would economic transplants have on offer for him?

They could be conceived as helpful in filling a genuine law making role if we understand the judiciary as entrusted with this task. The traditional, US-driven variety of law and economics profits from arguments like these. Proponents of law and economics are busy converting judicial reasoning into a quest for efficiency, suggesting minimising any discretion left to the judge in this manner. So far, this has not resonated strongly with European courts in general, or with the European Court of Justice more specifically. That court has taken a more traditional approach, elaborating mainly on statutory norms and prior judicial rulings. It is submitted here that this reluctance might have two main reasons. First, judges are not institutionally equipped to deliver expert economic assessments. Second, they are not usually willing to defer to the methods of another discipline.

Under this premise, we suggest three main scenarios in which economic transplants may still impact European judges' work. A judge may refuse to take them into account at all, sticking strictly to his internal perspective; much of the European continental tradition falls into this category. Alternatively, we may see judges adorning their decisions with economic clichés where these fit a decision reached mainly on other

[17] Lamfalussy Report (2001).

grounds. Lastly, and most interestingly, economic transplants may have a proper role to fill where a judge understands certain legal terms or concepts as requiring him to defer to a different discipline's assessment. This is an everyday occurrence where, for instance, experts are called upon to decide on good practices of, say, the medical profession. Possibly, terms such as 'market' or 'reasonable investor' in a similar way open a 'gateway' for the judge to step back and defer to an expert? Where judges are open to this form of 'epistemic deference'[18] to economics the promises outlined for the legislator carry their own meaning for the judiciary.

The promise of measurability could allow the judge to lighten his load by interpreting certain terms not as requiring a legal assessment from his internal viewpoint, but as allowing for a referral to an expert's opinion. Just like he may hear an expert on how a patient has to be treated in a medical malpractice case, he may hear an expert on what type of information is reflected in market prices or on how a rational actor on a financial market would have reacted.

The promise to strip away complexity, under this approach, allows disregarding, for instance, specifics of an individual case or competing rules and principles from neighbouring areas of the law. The case at hand gets boiled down to 'its core' and decided accordingly.

The promise of a common language allows the judge to signal where he defers his judgement in part to an expert's assessment. This may be in the form of a guiding economic rationale the legislator invoked when passing a statutory rule. It may also surface in deference to propositions by experts or expert agencies. Again, the European 'Lamfalussy-process' serves as an example for such deference. When being faced with the task of interpreting level-1 legislation, the judge may seek help in level-2 or level-3 measures. Assessments from the Commission and supporting agencies such as ESMA appear as transplants from the economic expert's world, to be taken as a given starting point for further judicial reasoning.

Revisiting how these promises play out for the judiciary, we start with the promise of measurability. We first look at how the promise depends on the judge identifying an economic transplant in a legal text. We point out that identifying an economic transplant is a matter of interpretation from the internal point of view. Only once this matter is settled, may one move on to the concept of judicial deference to experts.

[18] Brewer (1998:1540, 1586).

Reviewing the promise to strip away complexity we investigate the extent to which this methodological approach is compatible with adjudication. Jurisprudence of the European Court of Justice on disclosure of inside information will serve as an example of how the 'legal web' might interfere with attempts to radically simplify and boil down questions to what may be perceived as their economic core. We consider how the reading of a legal term or the understanding of a legal concept sometimes triggers ripple effects for other areas of the law. This web-like feature, so we will submit, limits the extent to which the promise to strip away complexity may be fulfilled.

The promise of a common language is of interest primarily to European rather than national courts. We investigate if European courts appear to be open to reverting to a common economic meta-language. At the same time, we shall consider how expert discourse among legislators, European agencies and scholars has the potential to influence judicial decisions.

It might be useful to point to a number of matters this book does not address. First, this is not a handbook or a primer on capital markets and corporate law. While many examples are taken from these areas of the law, there is no comprehensive survey intended, nor is doctrinal work presented. We do not suggest delivering new ways of reading European directives or regulations or offer new ways to interpret jurisprudence of the European Court of Justice.

Second, this is not an empirical piece of work. We have not counted, weighed or listed legislative acts, judicial decisions or scholarly articles which include a reference to what we understand as economic transplants. Also, we do not rank jurisdictions according to their use of economic transplants or follow the path economic transplants may have taken from one legal system to another. This focus differentiates our endeavour from scholarship on 'diffusion'.[19] The pieces of legislation and the judicial decisions we use by way of example do not pretend to be more than examples: anecdotal evidence on the existence of a phenomenon addressed here as economic transplants.

Third, and obviously, this is a lawyer's book. While we shall mention insights of economic methodology, of the philosophy of science and, in passing, of sociology and the political sciences,[20] these are observations

[19] See, for example: Gilardi (2016:9) on open research questions for work on 'diffusion'; Goderis/Versteg (2014) on diffusion of constitutional rights; delineating empirical legal studies and diffusion see Spamann (2015:137); (2009).

[20] See, for example, Mitchell (2011:52) on what he calls 'financialism'.

from an outsider, not pretending to advance research or make a contribution to the further development of theory in those disciplines.

Lastly, we do not offer any type of 'filter', checklist or cognitive theory for lawyers when working with economic transplants. A number of scholars, including myself, have suggested developing a 'filter' when integrating economic transplants,[21] to work out checklists or to develop a 'theory of cognitive function'[22] when trying to turn economic theory into workable economic transplants.[23] In the following chapters, I will raise doubts on the extent to which such efforts will produce workable results. Checklists would not only have to provide a state-of-the-art understanding of another discipline, including the ability to spot biases and errors. They would have to guard against the assumption that models may be indiscriminately mapped onto the legal world, or that empirical work may reflect carefully selected parts of reality only. More importantly, they would also need to take account of the transformation which any finding of economic theory undergoes when it enters the world of policy discourse, legislation, judicial and scholarly dialogue, thus morphing into an economic transplant. Hence, while I had entertained the hope of offering useful 'filters' for economic transplants, one conclusion of this book is a diminished optimism in such filters or checklists. Instead, we propose to work our way through differences in methodology of economics and of law, to capture some of the promises economic transplants hold and to understand where legal and economic methodology might be incompatible.

[21] Langenbucher (2015b:328). [22] See Schwartz (2015:1373).
[23] See for an excellent undertaking of this kind Hamann (2014), second chapter; his conclusion at p. 121, largely drawing on Abelson's 'MAGIC' criteria (magnitude, articulation, generality, interestingness, credibility) (1995:11–12), is, however, not shared here.