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Structure for a protocol

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	countries?
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	Robert Lensink – Reviewer
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1. Background

During the past two to three decades several developing countries have liberalized their domestic financial markets. In many cases, these liberalizations were triggered by both domestic and international developments. Domestically, government policies that focused on controlling financial markets—known in the literature as financial repression—became increasingly criticized, for it was felt that these policies were blocking the efficient functioning and development of financial institutions. The idea that stagnating economic growth and economic crisis were related to financial repression policies has gained ground since the early 1970s (McKinnon 1973; Shaw 1973). Internationally, the globalization of markets, including financial markets, also put pressure on governments to reconsider financial market controls.

The liberalization of financial markets may include several specific policies, aiming to improve the development of the financial system of a country. In particular, financial liberalization may focus on policies such as interest rate liberalization, abolishing credit controls, privatization of state banks, lifting bank market entry barriers, stock market liberalization, and capital account liberalization. Moreover, policies aiming at improving the regulation and supervision of financial markets may accompany these liberalization policies. Ultimately, governments apply financial liberalization policies, because they believe these policies contribute to more efficient financial institutions (i.e. financial sector development), and to higher saving, investment and economic growth rates. Yet, although financial liberalization policies have been widely applied, their potential consequences for micro- and macro-economic performance are far from obvious. At least, this seems to be the conclusion after consulting the available theoretical and empirical literature on this issue

In the literature several arguments in favor of liberalization have been put forward (see Fry, 1995, for a comprehensive overview). Most of these arguments start from the neoclassical perspective, assuming that markets are most efficient in allocating scarce resources to the most efficient investment projects which, in turn, would lead to higher economic growth rates. First, introducing market principles and competition in financial markets increases interest rates on deposits, which leads to higher saving and investment rates. Higher saving and investment rates in turn lead to higher economic growth. Second, competition puts pressure on profit margins, in particular on the interest rates on loans. This reduces the cost of capital, leading to a rise in investment and growth. Third, due to increased competition, financial intermediaries are stimulated to become more efficient by reducing overhead costs, by improving bank management, and by enhancing risk management. Moreover, they may be triggered to offer new financial instruments and services. More efficient financial intermediation leads to better allocation of resources over potential investment projects. Thus, the above arguments stress the fact that financial liberalization may have a quantity (more saving and investment) and/or a quality (more efficient investment) effect, which ultimately should lead to higher economic growth.

At the same, several arguments against financial liberalization have been put forward. First, it has been pointed out that financial liberalization as such does not solve the

problem of asymmetric information (Stiglitz and Weiss, 1981; Stiglitz, 2000). This may prevent financial intermediation from becoming more efficient in a liberalized market. Second, financial liberalization may actually increase information problems. When financial markets become liberalized and competition is increased, this may lead to a reduction of relationship lending, since borrowers may have more opportunities and will look for the cheapest way of financing their investment (Boot, 2000). However, a reduction of relationship lending also destroys information capital, thereby increasing asymmetric information. Third, financial liberalization may reduce profit margins, increasing the financial fragility of financial intermediaries (Hellmann et al., 1996, 1997, 2000). Related to the latter argument, critics of financial liberalization policies have stressed that these policies have played an important role in triggering financial and economic crises in the (recent) past (Davidson, 2002; Rodrik, 1998).

The above short discussion shows that from a theoretical perspective, the nature of the relationship between financial liberalization policies and economic growth is ambiguous. Given this theoretical ambiguity, it is important to investigate whether or not these policies lead to higher economic growth from an empirical point of view. Several papers have looked into this issue. These papers take different approaches, i.e. some look at the quantity effect, whereas other ones look at the quality effect of financial liberalization. Moreover, some studies use firm-specific data; other studies take a cross-country approach. These different approaches also have consequences for the extent to which impact of policies can be measured: whereas firm-specific (micro-data) studies may at least potentially provide evidence on impact (i.e. when the setting is experimental or quasi-experimental), this is generally difficult for cross-country studies.

A few studies have reviewed the empirical literature on the relationship between financial liberalization and growth (Gibson and Tsakalotos, 1994; Brownbridge and Kirkpatrick, 2000; Hermes and Lensink, 2008). The general picture that emerges from the empirical literature is that the empirical evidence is inconclusive. Yet, these studies provide a narrative discussion of the financial liberalization-economic growth relationship. They do not attempt to systematically review the empirical evidence, for example, by using meta-regression analysis.¹

The purpose of this systematic review is to shed light on the nature of the relationship between financial liberalization policies and economic growth with the help of meta-regression analysis, based on a large sample of empirical studies. Note that we refer to the *relationship* between instead of the *impact* of policies on growth. The latter would imply a causal link between financial liberalization and growth, which, however, for most empirical studies on this topic is difficult to investigate due to the difficulty in finding good instruments.² We do, however, attempt to find micro-data based studies that look into the impact of policies on growth as one of the objectives of our meta-analysis.

Additionally, we aim at synthesizing the evidence on the relationship between these policies and saving, investment and financial sector performance, as they are potentially

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¹ See Sutton et al. (2000) and Lipsey and Wilson (2001) for useful text books on meta-analytical methods.

² In the meta-regression analysis we propose (see section 3.5), we do control for the fact that studies may have used statistical techniques to control for endogeneity and reverse causality problems.

important channels through which financial liberalization policies may affect economic growth. However, whether a meta-regression analysis for these intermediate variables is possible will depend on the availability of empirical studies. In any case, the focus of the study will be on the liberalization-growth nexus. Moreover, we investigate the determinants of the heterogeneity of the results found in our sample of empirical studies. These determinants consist of several study specific characteristics, as well as a number of contextual variables, specifying the context in which policies have been carried out (see below). We are not aware of any systematic review of the financial liberalization-growth nexus using meta-regression techniques.³

2. Financial liberalization: Definitions and concepts

Financial liberalization refers to all government policies that aim at deregulating the domestic financial sector (i.e. banks and non-bank financial institutions such as pension funds and insurance companies), the foreign capital account and the stock market (Kaminsky and Schmukler, 2003). If the domestic financial sector is fully liberalized this means that there are no controls on interest rates and there are no directions from the government regarding the allocation of funds to specific industries. Also, banks and non-bank financial institutions are privately owned. Moreover, both domestic and foreign banks can enter the market. If the capital account is liberalized, there are no restrictions for residents and companies to move capital in and out of the country and there are no multiple exchange rate systems. A fully liberalized stock market refers to the situation in which investors, both domestic and foreign are able to hold domestic equity without any restrictions.

The above discussion shows that financial liberalization is multi-faceted concept. In principle, liberalizing financial markets may consist of a long list of specific policies. In the empirical literature, different studies have looked at different aspects of financial liberalization, using different measures to capture the underlying policies. Yet, the majority of studies focus on:

- Credit controls: directed credit towards favoured sectors or industries, ceilings on credit toward sectors, and high reserve requirements;
- Interest rate controls: direct interest rate controls by the government, or interest rate controls through the use of floors, ceilings and interest rate bands;
- Entry barriers: licensing requirements for newly established domestic financial institutions, entry barriers for foreign banks, and restrictions on certain types of banking practices, such as specialized bank services or establishing universal banks;
- Operational restrictions for securities markets: restrictions on staffing, branching and advertising, and the establishment of securities markets;
- Privatization of financial institutions; and
- Restrictions on international financial transactions: capital current account controls and the use of multiple exchange rates (Abiad and Mody, 2005).

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³ In recent years, several meta-analyses have been published focusing on macro-economic relationships. Examples are Poot and Nijkamp (2004) on fiscal policies and long-run growth, Koetse et al. (2009) on investment and uncertainty, and Doucouliagos and Paldam (2007) on aif effectiveness and growth. We will evaluate the contents of these studies for their approach and setup, because they may prove helpful for designing our own meta-analysis.

In the systematic review we will distinguish between these different policies and, depending on the amount of studies for each of these different sets of policies, carry out a statistical meta-analysis for the relationship between separate policies and economic growth.

3. Methods

Although many studies have been published on the relationship between financial liberalization and growth, using several different approaches and techniques to analyze the relationship, in this systematic review we choose to focus on studies using statistical regression-based methods. This choice is based on our own experience in the field of financial liberalization and its relationship to on economic growth (Hermes and Lensink, 2008). When we were writing this review paper, we found out that there is an extensive empirical literature on this issue using this type of method. Focusing on studies using regression-based methods allows us to perform statistical meta-analysis. A short-list of empirical studies we expect to include in the sample of studies for the meta-analysis (based on our own review article of 2008) is included in appendix 1. This also means that we exclude qualitative studies from the main analysis.

A proper systematic review includes a clear discussion of the methods used to select the sample of studies to be included in the meta-analysis. We first discuss our search strategy, followed by the selection (also referred to as the inclusion/exclusion) criteria we will use. Additionally, we shortly discuss some important methodological issues we have to take into account when carrying out the meta-analysis. These issues refer to the extent to which studies and/or study results can be considered independent when they use similar/same datasets, the use of different definitions of dependent and independent variables, and model comparability when sets of control variables differ between studies. Next, we discuss our codification strategy, i.e. the criteria we use to classify different characteristics of the studies in our sample that may be important for explaining the heterogeneity of the findings. Finally, we discuss the contextual (or moderating) variables we include in the analysis, allowing us to investigate whether different findings on the liberalization-growth relationship may be attributed to the context in which financial liberalization has been carried out.

3.1 Search strategy

To identify the set of studies relevant for the meta-analysis, we use the following procedure. First, we consult a number of review articles on the relationship between financial liberalization and economic growth (see, e.g., Gibson and Tsakalotos, 1994; Fry, 1995; Brownbridge and Kirkpatrick, 2000; Arestis and De Paula, 2008; Hermes and Lensink, 2008). Second, we explore the following list of electronic databases: Econlit, Google Scholar, JSTOR, IDEAS, JOLIS, SSCI, SSRN, ISI Web of Knowledge, Scopus, Econpapers and search engines for theses. We use the following search terms (searching in titles and abstracts of papers): financial liberalization (liberalisation), financial reform, financial regulation, interest rate controls, capital account liberalization (liberalisation), stock market liberalization (liberalisation), credit controls, bank privatization

(privatisation). These search terms are used separately as well as in combination with terms that directly or indirectly relate to economic growth. In particular, we use the following terms: (economic) growth, development, (economic) development, saving, investment, financial development, banking and bank efficiency. We also include search terms referring to methods, such as regression, regression analysis, 2SLS, and instrumental variables. Third, we manually search a number of academic journals, since our search strategy using databases and search terms as described above may, at least potentially, miss papers of interest. This may be the case if studies do not have one or more of the above key words in the title or abstract, but still do analyze the relationship between financial liberalization and growth, for instance because analyzing this relationship is not the primary issue of interest of the paper. The journals included in the manual search are: Applied Economics, Journal of Finance, Journal of Financial Economics, Review of Financial Studies, Review of Economics and Statistics, Journal of International Money and Finance, Journal of Development Studies, Journal of Development Economics, Journal of International Development, Economic Development and Cultural Change, World Development, World Bank Economic Review, and World Bank Research Observer. Fourth, we restrict our search to articles that have been published since 1990, because many countries have started implementing financial liberalization policies only since the late 1980s. Moreover, empirical studies before 1990 are generally of lower quality from a methodological point of view. Fifth, we consult the websites of international organizations working on issues related to financial liberalization and economic growth, e.g. IMF, World Bank, UN and OECD to search for papers and documents on the relationship between financial liberalization and growth. Sixth, we explore the reference list of all papers identified based upon the previous five steps to see whether we have missed any relevant publications. Finally, we contact experts in the field to ask them for unpublished papers and/or ongoing research.

3.2 Selection (inclusion/exclusion) criteria

After having specified the search strategy we need to specify the selection criteria based on which studies are added to the sample we use for carrying out the meta-analysis. The following selection (inclusion/exclusion) criteria are used. First, we include all studies that analyze the relationship between financial liberalization policies as independent variables on the one hand and economic growth, saving, investment, and/or financial sector performance (measured in terms of (commercial) bank performance) as dependent (or output) variables on the other hand. Second, we include only studies that provide at least information on effect size, i.e. they provide information on the simple (Pearson) correlation between a measure of financial liberalization and economic growth (and/or saving, investment and financial sector performance). This information can be collected from correlation tables and is crucial in order to be able to carry out a statistical meta-analysis.⁴ Moreover, we also collect information on the partial correlation coefficient, which is defined as the association between measure(s) of financial liberalization and growth (saving, investment, financial sector performance), given a set of controlling

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⁴ In case studies do not provide information on correlation coefficients, we will contact the authors to ask for the data underlying the empirical results they present in their papers. More generally, we intend to contact authors of primary studies to ask for any additional information about their work if needed, and to obtain additional unpublished working papers and/or results from ongoing research.

variables.⁵ The partial correlation coefficient can be retrieved from tables reporting the results from multiple regressions (Doucouliagos and Ulubaşoğlu, 2008; Carney et al., 2010). Third, we include published articles as well as working papers. Fourth, we specify the search we carry out in English. This does not exclude the possibility that studies written in other languages than English will be included. The number of non-English written studies is expected to be limited, however.

The dataset we derive using the above search strategy and selection criteria contains both multi-country and single-country studies, as well as studies using different statistical methods, time periods, country regions, etc. The impact of these study characteristics on the results reported in the studies in our sample will be taken into account by applying meta-regression analysis (see below).

3.3 Methodological issues

At least of the literature we review in this meta-analysis belongs to studies using so-called Barro-type regression models. These models have been criticized because they often lack a clear underlying theoretical model, they have problems in identifying causal relationships, they suffer from the problem of omitted variable bias, and they often do not pay attention to the potential heterogeneity of determinants of growth over time and space. We acknowledge the importance of these problems and their potential impact on the quality of the meta-analysis. In this respect, our meta-analysis can at best be as good as the underlying studies. In particular, studies may differ with respect to definitions of dependent and independent variables and with respect to the sets of control variables used. We intend to take into account these problems as much as possible.

First, we acknowledge that dependent variables may differ between studies, which will be dealt with by transforming them so as to make them comparable as much as possible. In case variables differ substantially, we will carry out meta-analyses separately for each of these variables. Second, if financial liberalization variables differ substantially between studies, we will also consider doing different meta-analyses, depending on the number of studies available for each of the variables used in different studies.

A third important issue relates to the fact that different studies may use different sets of control variables, leading to different model specifications. This may make it difficult to directly compare results from different studies. In the literature on meta-analyses methods have been developed to address this problem (see, e.g., Abreu et al., 2005). We will use these methods to correct for the problem of different specifications in the underlying primary literature.

Another important methodological problem in meta-analyses in political science and economics is the definition of independent studies. This relates to the issue of how studies should be treated when they use data from similar or even the same groups of countries. We follow the standard practice in meta-analyses in these fields by treating

⁵ If the number of studies allows this, we will do separate meta-analyses for studies based on simple and partial correlations as well as for studies dealing with impact in a more convincing way (i.e. studies using instrumental variables approaches).

studies as independent if they have been prepared by different authors, even if these studies use the same countries and/or time periods (see, e.g., Stanley (2001), Hunter and Schmidt (2004), Abreu et al. (2005) and Doucouliagos and Ulubaşoğlu (2008) on this issue).

A final important issue we may have to deal with is the fact that our observations can be hierarchically structured. Some studies in our sample may contain more than one observation relevant for our analysis, for example, because they present alternative specifications of the financial liberalization-growth model. The meta-regression techniques discussed above all assume that observations are independent, whereas in case of hierarchically structuring they are not. There are various solutions for this problem, such as, e.g. taking an average effect size of all effect sizes presented in one study, picking one randomly, estimating cluster robust standard errors (i.e. using the so-called Huber-White sandwich estimator), applying multilevel models (see e.g. Goldstein, 1995), etc. Depending on the nature of the set of studies selected for the meta-analysis and the extent to which hierarchically structured observations is a problem, we will make use of one or more the methods listed above to solve the problem of assuming independency of observations.

3.4 Identifying study characteristics (codification criteria)

After having selected the studies for the meta-analysis, we identify several important study characteristics that may help us to carry out the statistical meta-analysis and explain the heterogeneity of the findings between different studies. In other words, using the list of characteristics, we create a dataset derived from the studies included in our sample, consisting of variables based on which we can determine the direction and magnitude of the relationship between financial liberalization and economic growth, as well as establishing which characteristics may explain the heterogeneity of the findings reported in the studies in our sample. The following list of study characteristics will be collected from the studies in our sample (this list has been partly inspired by two recent statistical meta-analyses, i.e. Carney et al. (2010) on business groups and firm performance; and Doucouliagos and Ulubaşoğlu, (2008) on democracy and growth):

- Type of financial liberalization policy or policies analyzed (we distinguish the following types: interest rate deregulation, abolishing credit controls, capital account liberalization, stock market liberalization, bank privatization and any combinations of these different policies)
- Measurement of financial liberalization policy or policies (collecting information on the way financial liberalization policy or policies have been measured)
- Nature of the dependent variable: economic growth, saving rate, investment rate, bank performance measure (i.e. profitability, cost effectiveness, bank (cost) efficiency)
- Pearson correlation (derived from the correlation matrix)
- Partial correlation coefficient (derived from regression results)
- Year of publication
- Sample period
- Journal quality (does the journal have an impact factor reported in ISI Web of Science yes or no)

- Number of citations received (collected from ISI Web of Science and from Scopus)
- Empirical estimation technique used (OLS yes or no)
- Endogeneity (is addressed yes or no, for example by using formal techniques such 2SLS or 3SLS techniques and/or other methodological approaches such as before after events analysis, with and without reforms analysis, etc.)
- Cross-section versus panel data
- Cross-country versus single country analysis
- Sample size
- Country regions included (Latin America (yes/no), Asia (yes/no), Africa (yes/no))
- Number of countries included
- Names of author(s) and affiliation(s)
- The author(s) acknowledge(s) having received feedback from any of the other authors in our sample of studies (yes or no)
- The author(s) has (have) previously published papers on financial liberalization (yes or no)

The identification of the above list of characteristics for each study in our sample will be carried out by two members of the research group. Although the characteristics are straightforward and clear, double-checking the identification process increases the reliability of the codification process. Moreover, this procedure is in line with the Campbell Collaboration standards for carrying out meta-analyses.

3.5 Moderating variables

Another potential source for the heterogeneity of findings reported in the studies in our sample may come from the context in which financial liberalization policies have been carried out. In some of the review studies, the extent and quality of financial regulation, the quality of the institutional environment and the political stability have been mentioned as examples of potentially important contextual variables that may explain the nature of the relationship between financial liberalization and growth (Arestis and Caner, 2009; Hermes and Lensink, 2008). It has been argued that the relationship between financial liberalization policies and growth may be influenced by the extent to which financial regulations aiming at reducing the probability of bank failures (i.e. use of reserve requirements, use of capital adequacy ratios, deposit insurance systems, etc.) are in place, by the extent to which the general institutional environment is developed, and by the extent to which the country is considered to be politically more stable.

In our meta-analysis, the importance of the abovementioned moderating variables will be taken into account, depending on the type of analysis. For cross-country studies, we will codify whether or not variables related to financial regulation, the institutional environment and political stability are taken into account in the set of control variables used. In case of country-specific analyses, we will test the importance of the context in which policies have been carried out by using country-specific information on measures of contextual variables. More specifically, we will add these contextual variables to our meta-regression model (for a specification of this model, see section 3.5 below). We will use the following measures and data sources:

- Financial regulation measures based upon a worldwide dataset created by Barth et al. (2006);
- Institutional quality measures based upon the Worldwide Governance Indicators dataset created by the World Bank; and
- Political stability measures based upon the Polity IV dataset.

The datasets we use for collecting information on contextual variables are widely used in the economic growth literature and generally seen as the best sources for collecting this type of information.

3.6 Estimation procedure

As was mentioned above, the purpose of this review is to shed light on the nature of the relationship between financial liberalization on the one hand and economic growth, saving, investment and financial sector performance on the other hand, using statistical meta-analysis with the help of data derived from a large sample of empirical studies. Moreover, we investigate the determinants of the heterogeneity of the results found in our sample of empirical studies. With respect to the issue of heterogeneity we focus on a number of characteristics of the studies in our sample, such as country composition, data differences, estimation techniques, journal quality, etc., as well as on moderating variables such as the existence and quality of financial regulation, institutional quality and political stability.

We start the analysis by evaluating the magnitude, or effect size, of the relationship between financial liberalization and growth. For this, we use the simple (Pearson) correlations and the partial correlation coefficients derived from the studies in our sample. The effect size statistics are weighted by using the sample size of the regression model from which the information the effect size is taken. Using these weighted effect size statistics allows us to calculate the mean financial liberalization-growth effect, which is the best estimate of the literature on the relationship between financial liberalization and growth (Doucouliagos and Ulubaşoğlu, 2008). The procedure for deriving the mean effect is repeated for the sample of studies and estimates focusing on the relationship between financial liberalization on the one hand and saving, investment and financial sector performance on the other hand. The accuracy of the mean effects calculated from the underlying set of empirical studies can be determined by constructing confidence intervals. We construct these intervals using both fixed effects and random effects meta-analysis techniques (Lipsey and Wilson, 2001).

In the second part of the statistical meta-analysis, we investigate the origin of the heterogeneity of the findings presented in the empirical studies in our sample. In this part, we use meta-regression analysis, based on the following specification of the model (see also Doucouliagos and Ulubaşoğlu, 2008):

$$r_{i} = \delta_{0} + \delta_{k} DATA_{i,k} + \delta_{m} REGION_{i,m} + \delta_{n} TIME_{i,n} + \delta_{p} SPEC_{i,p} + \delta_{t} OTHER_{i,t} + \varepsilon_{i}$$
 (1)

In this model r denotes the partial correlation coefficient reported in study i; *DATA* refers to a vector of k data characteristics of study i; *REGION* refers to a vector of M regional dummies of study i; *TIME* is a vector of n time dummies of study i; *SPEC* is a vector of p

variables reflecting different statistical specifications used in study i; *OTHER* is a vector of t variables reflecting other characteristics of study i (such as journal quality, citations, etc.). The above model is used to determine the origin of heterogeneity of results with respect to the relationship between financial liberalization and economic growth. We will use a similar model for analyzing the heterogeneity of study findings regarding saving, investment and financial sector efficiency as output variables, provided that we will find a sufficient number of studies for each of these variables.

In the final part of the meta-analysis, we investigate the role played by a set of moderating variables in explaining the heterogeneity of the findings of the studies in our sample. In particular, we focus on financial regulation, institutional quality and political stability. The model specification we use is:

$$r_{i} = \delta_{0} + \delta_{k} DATA_{i,k} + \delta_{m} REGION_{i,m} + \delta_{n} TIME_{i,n} + \delta_{p} SPEC_{i,p} + \delta_{t} OTHER_{i,t} + \delta_{p} MODE_{i,p} + \varepsilon_{i}$$

$$(2)$$

This model is similar to the model specification of equation (1), but is extended with *MODE*, which is a vector of v moderating variables related to study i. As was mentioned above, for cross-country studies, we will codify whether or not variables related to financial regulation, the institutional environment and political stability are taken into account in the set of control variables used. The codified variables, which are dummy variables indicating whether or not a contextual variable has been included as a control variable in study i, are included in vector *MODE*. In case of country-specific analyses, we will test the importance of the context in which policies have been carried out by using country-specific information on measures of contextual variables. In this case *MODE* consists of country-specific measures of contextual variables. As is the case in the second step of the analysis, the model specified in equation (2) is used to determine the origin of heterogeneity of results with respect to economic growth, saving, investment and financial sector efficiency as output variables in the studies in our sample, provided that we will find a sufficient number of studies for each of these variables.

The two equations outlined above will be estimated using both the fixed effects and the mixed effects model, because in most cases it is unclear which one of these two models is most appropriate for analyzing the heterogeneity of findings in different studies. The fixed effects model assumes that the differences observed with respect to the effect sizes found in different studies can be perfectly explained by a set of variables that can describe differences in study characteristics. The mixed effects model allows for variation between study outcomes due to systematic factors (i.e. study characteristics) as well as random sources. Put differently, the mixed effects model allows for within and between-study variance (De Dominicis et al., 2008). Both models have their pros and cons. While the fixed effects model requires the heterogeneity of the findings for a given sample of studies to be perfectly observable, this assumption is more relaxed when using the mixed effects model. At the same time, however, the fixed effects model has more statistical power. Moreover, the mixed effects model assumes that the effect sizes are independently distributed; this assumption does not apply when using the fixed effects model.

As a final remark, we would like to refer back to the methodological issues referred to in section 3.3. Given the remarks in this section, our meta-analysis may prove to have difficulties in coming up with a useful review of the impact of financial liberalization on growth. At this stage, it is difficult to assess whether this indeed will be the case. As discussed, we will take into account all possible adjustments and corrections to come up with a meaningful meta-analytical review. However, in case it turns out to be difficult to solve the methodological problems discussed above we may be forced to follow another approach. One potentially interesting fall-back option in this respect may be to review the signs and statistical significance of relationships produced in different studies. This approach has been successfully used in other meta-analyses; see e.g. Koetse et al. (2009).⁶

4. Information on the study team

The study team consists of Niels Hermes (University of Groningen) and Robert Lensink (University of Groningen and Wageningen University). Hermes and Lensink have a lot of experience in writing extensive reviews of existing literature on topics such as development aid, capital flight and microfinance; see e.g. Hermes and Lensink (2001), Hermes and Lensink and Murinde (2003), McGillivray, Feeny, Hermes and Lensink (2006) and Hermes and Lensink (2007); see appendix II for full references of these studies.

Moreover, both Hermes and Lensink have been involved in several research projects related to financial liberalization, and in the context of these projects, have developed expertise and knowledge of the available literature on this subject. As part of these projects they have also reviewed existing literature on the impact of financial liberalization policies. Additionally, they have organized several conferences and workshops related to the impact of financial reform policies (among which were a number of workshops organized in the framework of two ACE/Phare projects financed by the European Union on financial systems in Eastern Europe). See, among others, Hermes and Lensink (1996), Hermes and Lensink (2000) and Hermes and Lensink (2004) for publications related to these conferences and workshops. Hermes and Lensink have also participated in a large research project of UNU-WIDER (in Helsinki) on financial development, growth and poverty reduction for which they have prepared a study on the impact of financial liberalization on saving, investment and growth; see Hermes and Lensink (2008). Again, see appendix II for full references.

Hermes will be responsible for the content and writing of the study, for the systematic review methods, and (together with a research assistant) for the information retrieval. Lensink will be responsible for the systematic review methods, for the information retrieval (together with a research assistant), and for the statistical analysis.

⁶ We thank one of our reviewers (Henri de Groot) for this suggestion.

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APPENDIX I: Short-list of examples of studies to be included in the meta-analysis

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APPENDIX II: References to earlier work of the research team related to the metaanalysis

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