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## Article

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## Empirical Paper

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# Perception of formal and informal institutions by entrepreneurs in China, Morocco, and Germany – A cross-cultural pilot study

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### Abstract:

**Introduction and Aims:** Entrepreneurship and the business environment, in general, are being influenced by the existence of formal and informal institutions. This study focuses on the negative versus positive perceptions of Moroccan, Chinese, and German entrepreneurs to formal and informal institutions, and the associations of these perceptions with self-efficacy and market versus network orientation of the business environment.

**Methods:** In a sample of  $n = 319$  female and male entrepreneurs, we have examined similarities and differences in the perception of informal and formal institutions and their effects on self-efficacy and business strategy, while conducting  $t$ -tests and linear regressions.

**Results:** In all three cultural contexts, both formal and informal institutions play a significant role because of different reasons.

**Conclusion:** The nature of entrepreneurship is complex as both formal and informal institutional factors are differently associated with businesses. The results could enhance the understanding regarding the coexistence of formal or informal institutions within the business environments of different countries and the connections between business orientation and self-efficacy.

**Keywords:** formal institutions, informal institutions, self-efficacy, network orientation, market orientation

**JEL Classification:** D02, D23

## 1 Introduction

When we refer to institutions, there is a need for clarification whether we use the term to describe norms or institutional bodies. In this paper, we consider institutions as frameworks consisting of norms, rules, and mechanisms, which enforce the given rules. Thus, institutions guide social relationships and limit the possibilities of exploitations in interactions. Through institutions, we increase the predictability and continuity in our personal and business relations. Their essentiality lies in their role as frameworks for social interactions. Depending on their nature and the reasons for their establishment, they can hinder or foster the activity of economic actors [Leković, 2011: 361].

Entrepreneurship and the business environment in general, are being influenced by the existence of formal and informal institutions. Formal institutions are linked to rules implemented by laws, regulations,

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and market transaction rules and sanctions, which follow their non-implementation [Leković, 2011: 358]. Governments are responsible for the enforcement of formal rules. However, besides the existence of formal institutions, there are institutions, including unwritten norms, values, attitudes, traditions, and behaviors, which are acceptable in a given society. These informal institutions can affect the business environment through an influence on people's behavior. Informal institutions are implicit, based on social constructs, and transmitted through culture [Stephan et al., 2014]. They reflect common understandings within a cultural setting and enhance cooperation and coordination [North, 1991].

Thus, culture is a key factor enhancing mutual rules, which are being introduced outside official channels. In case of a favorable country's framework regarding entrepreneurial activity, the tendency will be toward more productive ways of wealth generation. On the other hand, in the case of a non-favorable environment, the tendency will be toward informal institutions. Research has demonstrated that formal institutions are dominating and being perceived as more efficient in democratic countries [Bratton, 2007], whereas countries with a lower level of democracy are usually related to informal institutions [Bratton, 2007].

According to Aidis and Mickiewicz [2006], formal institutions such as strong property and intellectual rights for inventors of products and processes are key elements for the flow of innovation. Estrin et al. [2011: 27] state that for projects to reach growth, formal, impersonal institutions, and the stability, which is associated with them, are essential. Thus, any weakness in property rights can hinder the development of growth, since entrepreneurs will probably not take the risk of investing in large-scale projects.

This view though ignores that businesses are reacting within the structure of the given framework involving incentives and results from a combination of both, formal and informal institutions. Even in less democratic contexts, there is an implementation of formal rules, which have to be followed. However, we can assume that in less democratic contexts the informal institutions are being perceived more positively. Since the business environment of a country is being influenced by the country's cultural context, in many cases formal and informal institutions coexist in a complementary way [Leković, 2011: 361]. The importance of informal institutions for daily, as well as for business life, has been identified by the new institutional approach [Bukowski et al., 2014: 478].

Therefore, although previous literature has frequently addressed formal and informal institutions separately, we suggest that their coexistence should be considered to better understand their connections with entrepreneurship.

According to Getz [2008] who conducted a study in El Pozo, of Mexico, formal and informal institutions coexist and support farmers in gaining access to their products in the market.

Whenever formal institutions do not diverge to informal institutions, the conditions for the efficient operation of both types are being fulfilled [Leković, 2011: 361]. Winiecki [2000] argues that the harmonic coexistence of both institutional types can lead to long-term economic success [Winiecki, 1998: 21]. A similar stance is taken by the World Bank Development Report [2002] which states: "*Where informal institutions operate effectively, and when formal institutions require supporting institutions, building new formal institutions may not be a priority for policymakers.*" It suggests, "*accepting informal institutions when formal institutions would not have their desired impact.*" Nevertheless, that does not mean that formal and informal institutions supplement always one another. In contrast, they can also be conflicting. In the case of a conflicting coexistence of formal and informal institutions, the arrangements are inefficient (Table 1).

Institutions shape the behavior of enterprises and influence their ultimate success or failure [Peng, 2003; Wright et al. 2005] and thus improve the self-efficacy and business strategy orientation such as the

**Table 1.** Types of the relationship between formal and informal institutions

|  | Ineffective formal institutions | Effective formal institutions |
|--|---------------------------------|-------------------------------|
| Compatible goals between actors in formal and informal institutions  | Substitutive                    | Complementary                 |
| Conflicting goals between actors in formal and informal institutions | Competing                       | Accommodating                 |

**Source:** Helmke and Levitsky [2003] in Estrin and Prevezer [2010: 7].

market or network orientation. Self-efficacy has been defined by Bandura [1982] as the belief that success is based on the desired behavior as a precondition for the production of an outcome. Therefore, self-efficacy is the confidence-building measure of an entrepreneur in his ability to mobilize his cognitive, motivational, and behavioral resources, to be successful in the performance of a task.

In a study by Zhao et al. [2005] on self-efficacy, it was shown that this factor affects the choices to activities, goals, persistence, and performance.

The study of Al-Awbathani et al. [2019] provided evidence on informal institutions as a moderator of self-efficacy and outcome expectations.

Narver and Slater (1990) have defined *market orientation* as a business strategy that mostly creates added value for consumers, and therefore, beneficial long-term results for corporations can be reached. According to these authors, *market orientation* is based on a focus toward the customers, the competitors, and inter-functional coordination, whereas *network orientation* relies on relations between individuals, groups, or organizations [Rasmussen et al., 2015]; informal collaboration [Kreiner and Schultz, 1993]. Here relationships are based on mutual benefit, trust, and reciprocity [Mitchell et al., 2016].

Because of the complex relationship between formal and informal institutions, in the current study, we examine an assumed coexistence in two emerging economies, namely, China and Morocco, and Germany as an example of a developed economy.

## 2 Examples of the importance of informal institutions in China, Germany, and Morocco

Formal and informal institutions do not have the same importance in all countries. According to Roche [2005], informal networks and family traditions are essential in the business environment of Asia. Formal institutions do seem to play a greater role in Western European countries such as the UK and Germany. One has to consider the fact that the corporate environment in transition economies such as China or Morocco is changing and so are the rules of the game. Therefore, during the last decades, these economies have been influenced by Western societies and the formal institutions are playing an increasing role [Högberg, 2009: 2].

China is a collectivist society scoring only 20 on the Hofstede dimension of individualism. In societies that have high scores in collectivism, group interests are more important than individual interests [Hofstede, 2001]. Since government rules and regulations primarily aim to serve the public interest [Bozeman, 2000], we expect that collectivist societies favor formal institutions. On the other hand, one of the key elements of the Chinese society on which in many cases business activity is based is family. The family environment and personal relationships, which are in general (“Guanxi”) important for China, are based on mutual trust [Gong Suzuki, 2013: 376]. In emerging economies, such as China and Morocco, social networks can compensate for institutional drawbacks [Estrin et al., 2006]. Thus, the family structures and the strong personal relationships that are more essential in collectivist societies [Triandis, 2001] allow the emergence of informal institutions. The informal rules and values can in turn enable the collection of information [Coulthard and Loos, 2007: 7] since trust eases information sharing. Empirical findings show that informal interactions can minimize transaction costs [Gulati et al., 2000: 209-210], improve decision-making, and decrease risk because of information sharing [Bulkley and Van Alstyne, 2004: 152], thus enhancing firm performance. Closely related to *trust* is the concept of *social capital*, another vital informal institution. Bourdieu [1986: 248] defines social capital as “*the aggregate of the actual or potential resources that are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition.*”

In particular, in societies, which are based on hierarchical structures such as China, the extent of trust within a group is increased. In contrast, outside the group, trust decreases drastically. The findings of La Porta et al. [1997] support the notion that *trust* increases judicial efficiency, bureaucratic quality, and tax compliance. As trust increases, corruption decreases. People in societies with a high level of trust, identify more with their government and other official agencies with the consequence of higher credibility which

in turn, enhances innovation and investment [Putnam, 1993; Knack and Keefer, 1997]. One should though consider the ambiguous character of institutional relations, since transparent and non-corrupt societal structures increase the trust level, as in the German case. Even though the focus in developed economies is more on formal business relationships [Zhou et al., 2007] since corruption in these countries is not being tolerated, entrepreneurship is promoted, power distance is less important, and therefore equality between managers and employees is enhanced, and trust as an informal institution is fostered. At the same time, research has demonstrated that societies that score high in *uncertainty avoidance* favor formal rules and specific regulations to overcome uncertain situations [e.g., House et al. 2004].

Whether *trust* improves formal institutions (China) or formal institutions improve trust (Germany), according to Papastamatelou et al. [2016: 85, 88, 90] trust increases firm performance in both societies. Thus, informal institutions are assumed to play a key role in China and Germany. Since Morocco is an emerging economy with high levels of corruption, we additionally assume that informal institutions will be perceived as more positive than the formal ones. Whereas the business environment is being promoted and investments are made by foreign investors around the globe, we further hypothesize that formal institutions will also be perceived positively.

In the current study, we focus on the negative versus positive perceptions of the Moroccan, Chinese, and German entrepreneurs to formal and informal institutions and on the associations of these perceptions with self-efficacy, as well as with market versus network orientation of the business environment. To our knowledge, it is the first study, which examines the associations between the perception of formal and informal institutions, self-efficacy, and market orientation. We assume that in all three cultural contexts, formal and informal institutions are of great importance and are perceived positively since they fulfill specific functions. In Germany, although formal institutions are generally prevalent, the informal institutions, which play lesser roles when compared to the emerging economies are still significant. Several studies have shown that in practice entrepreneurs operate somewhere in between the formality and informality continuum [e.g. De Mel et al., 2013; De Castro et al., 2014].

While most studies focus on the examination of formal institutions, this study additionally deals with the impact of informal institutions, since positive influences of synergetic effects of formal and informal institutions are being assumed.

## 2.1 Hypotheses

H1: Formal and informal institutions will be perceived positively in Morocco, China, and Germany.

H2: In Germany, informal institutions will be perceived as less positive than in the two emerging economies.

H3: In all three countries, the positive perception of formal rules and the negative perception of informal rules will be associated with market orientation.

H4: In all three countries, the positive perception of informal rules and the negative perception of formal rules will be associated with network orientation and increased self-efficacy.

## 3 Methods

### 3.1 Participants

The data collection took place in Morocco, China, and Germany. Participants were recruited from MBA courses of the involved institutions. The sample consisted of entrepreneurs working in the middle management of companies of the respective countries, and they were primarily responsible for reaching the goals set by the top management. They were involved in the day-to-day business operations of the

companies and possessed the necessary insights. All subjects signed the informed consent forms and filled in the questionnaires in paper-pencil request forms.

The sample was made up of  $n = 83$  Moroccan,  $n = 153$  Chinese and  $n = 83$  German entrepreneurs ( $M_{\text{age}} = 33.0$  years,  $SD = 8.5$ ). 58.0% were males, 41.2% females and 0.8% did not indicate their gender.

The participants were working in the following sectors: manufacturing, electricity, gas and water supply, construction industry, logistics, wholesales/retail, business sector, hotels/restaurants financial services, real estate, entertainment, sports, social services, pharmaceuticals, the chemical industry, and other sectors.

### 3.2 Measures

We have defined formal institutions as “written rules,” such as government regulations, political rights, market restrictions, and informal institutions as “unwritten rules” such as traditions and codes of conduct.

The independent variables: *formal rules positive perception*, *formal rules negative perception*, *informal rules positive perception*, *informal rules negative perception*, and *property and intellectual rights* have been created by indices of two variables respectively, which were taken from the World Economic Forum. Besides, the independent variables: *judicial system efficacy perception*, *corporate governance efficacy perception*, and *ethics and behavioral firm perception* were also taken from the World Economic Forum (see Table 2).

The dependent variables *market and network orientation* have been formed by one item respectively. The items are based on the literature, and have been pre-tested (see Table 2).

Self-Efficacy, as the third dependent variable, has been formed by an index of the 10-item Likert-type (see Table 2). The German version of this scale was validated by Jerusalem and Schwarzer [1999]. For the analyses, the scale was reversed so that a high value represents a high level of self-efficacy.

**Table 2.** Questionnaire items

| Variable                                  | Type               | Source            | Items  | Scale                                  |
|---|--------------------|-------------------|--|--|
| <b>Formal rules positive perception</b>   | <b>Independent</b> | <b>WEF pillar</b> | Average calculation index of the following items:<br>– To what extent do you evaluate the formal institutions (“written rules”) in your country as a chance for the success of your company?<br>– In the context of competing with your most relevant competitors do you think you benefit from formal institutions at the expense of these competitors? | Not at all – Very much (7 point scale) |
| <b>Formal rules negative perception</b>   | <b>Independent</b> | <b>WEF pillar</b> | Average calculation index of the following items:<br>– To what extent do you evaluate formal institutions (“written rules”) as an inhibiting factor for the success of your company?<br>– In the context of competing with your most relevant competitors do you think formal institutions will discriminate you in favour of these competitors?         | Not at all – Very much (7 point scale) |
| <b>Informal rules positive perception</b> | <b>Independent</b> | <b>WEF pillar</b> | Average calculation index of the following items:<br>– To what extent do you evaluate informal institutions (“unwritten rules”) as a chance for the success of your company?<br>– In the context of competing with your most relevant competitors do you think you benefit from informal institutions at the expense of these competitors?               | Not at all – Very much (7 point scale) |
| <b>Informal rules negative perception</b> | <b>Independent</b> | <b>WEF pillar</b> | Average calculation index of the following items:<br>– To what extent do you evaluate informal institutions (“unwritten rules”) as an inhibiting factor for the success of your company?<br>– In the context of competing with your most relevant competitors do you think informal institutions will discriminate you in favor of these competitors?    | Not at all – Very much (7 point scale) |

(continued)



Table 2. Continued.

| Variable                                 | Type        | Source                         | Items   | Scale  |
|--|-------------|--------------------------------|---|--|
| Judicial system efficacy perception      | Independent | WEF pillar                     | – In your country, to what extent is the judiciary independent from the influences of members of government, citizens, or firms?  | Heavily influenced – Entirely independent (7 point scale)  |
| Corporate governance efficacy perception | Independent | WEF pillar                     | – In your country, how would you characterize corporate governance (the relationships) by investors and boards of directors?  | Management has little accountability to investors and board – Management is highly accountable to investors and boards (7 point scale) |
| ethics and behavioral firm perception    | Independent | WEF pillar                     | – In your country, how would you rate the corporate ethics of companies (ethical behavior in interactions with public officials, politicians, and other firms)?   | Extremely poor - among the worst in the world – Excellent - among the best in the world (7 point scale)                                |
| Property and intellectual rights         | Independent | WEF pillar                     | Average calculation index of the following items:<br>– In your country, how strong is the protection of property rights, including financial assets?<br>– In your country, how strong is the protection of intellectual property, including anti-counterfeiting measures?   | Extremely weak – Extremely strong (7 point scale)  |
| Market orientation                       | Dependent   |                                | – Market-based strategies (formal and impersonal, rule-based, more calculative)   | Not at all – Very much (7 point scale)   |
| Network orientation                      | Dependent   |                                | – Relationship-based strategies (informal and interpersonal)  | Not at all – Very much (7 point scale)   |
| Self-efficacy                            | Dependent   | Jerusalem and Schwarzer [1999] | Average calculation index of the following items:<br>– I can always manage to solve difficult problems if I try hard enough.<br>– If someone opposes me, I can find the means and ways to get what I want.<br>– It is easy for me to stick to my aims and accomplish my goals.<br>– I am confident that I could deal efficiently with unexpected events.<br>– Thanks to my resourcefulness, I know how to handle the unforeseen situation.<br>– I can solve most problems if I invest the necessary effort.<br>– I can remain calm when facing difficulties because I can rely on my coping abilities.<br>– If I am in trouble, I can usually think of a solution.<br>– When I am confronted with a problem, I can usually find several solutions.<br>– I can usually handle whatever comes my way. | Not at all true – Exactly true (4 point scale)   |

### 3.3 Statistical analysis

For the data analysis, SPSS, version 19 was used. We have used an alpha level of 0.05 for all statistical tests. We have conducted t-tests to compare the perception of the variables by the participants in the three cultural contexts. Moreover, we have conducted regression analyses to conclude whether the positive and negative perception of formal and informal institutions indicates differences concerning self-efficacy, market, and network orientation.

## 4 Results

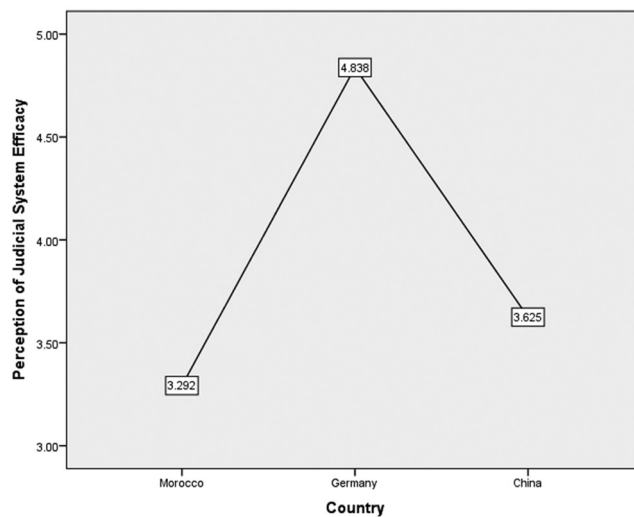
Different aspects of (formal and informal) institutions were considered: The perception of the judicial system efficacy was significantly higher in Germany compared to Morocco ( $p < 0.001$ ) and China ( $p < 0.001$ ). No differences were observed between Morocco and China ( $p = 0.136$ ) (Table 3 and Figure 1).

The same pattern of higher values in Germany (all  $p < 0.001$ ) and no differences between Morocco and China (all  $p > 0.281$ ) were also observed for the perception of property and intellectual rights protection (Table 4 and Figure 2).

**Table 3.** Differences in the perception of the judicial system efficacy

| Morocco  |           | Germany  |           | <i>t</i> (244) | <i>p</i>    | Cohen's <i>d</i> |
|----------|-----------|----------|-----------|----------------|-------------|------------------|
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |                |             |                  |
| 3.29     | 1.69      | 4.84     | 1.40      | −6.63          | $p < 0.001$ | 1.00             |
| Germany  |           | China    |           | <i>t</i> (244) | <i>p</i>    | Cohen's <i>d</i> |
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |                |             |                  |
| 4.84     | 1.40      | 3.62     | 1.63      | 5.88           | $p < 0.001$ | 0.80             |
| Morocco  |           | China    |           | <i>t</i> (245) | <i>p</i>    | Cohen's <i>d</i> |
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |                |             |                  |
| 3.29     | 1.69      | 3.62     | 1.63      | −1.51          | $p = 0.136$ | 0.99             |

**Note:** Values are reported for two-tailed tests.



**Figure 1.** Perception of judicial system efficacy.

**Table 4.** Perception of property and intellectual rights protection

| Morocco  |           | Germany  |           | <i>t</i> (175) | <i>p</i>    | Cohen's <i>d</i> |
|----------|-----------|----------|-----------|----------------|-------------|------------------|
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |                |             |                  |
| 3.77     | 1.39      | 5.75     | 0.582     | −12.30         | $p < 0.001$ | 2.00             |
| Germany  |           | China    |           | <i>t</i> (242) | <i>p</i>    | Cohen's <i>d</i> |
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |                |             |                  |
| 5.75     | 0.582     | 3.56     | 1.48      | 13.23          | $p < 0.001$ | 0.32             |
| Morocco  |           | China    |           | <i>t</i> (243) | <i>p</i>    | Cohen's <i>d</i> |
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |                |             |                  |
| 3.77     | 1.38      | 3.56     | 1.48      | 1.08           | $p = 0.281$ | 0.15             |

**Note:** Values are reported for two-tailed tests.



The same holds true for corporate governance efficacy perception (Table 5 and Figure 3).

In the case of the perception of ethics and firm behavior, we have observed higher values in Germany compared to Morocco ( $p = 0.008$ ) and no significant differences between Germany and China ( $p = 0.131$ ), as well as between Morocco and China ( $p = 0.157$ ) (Table 6 and Figure 4).

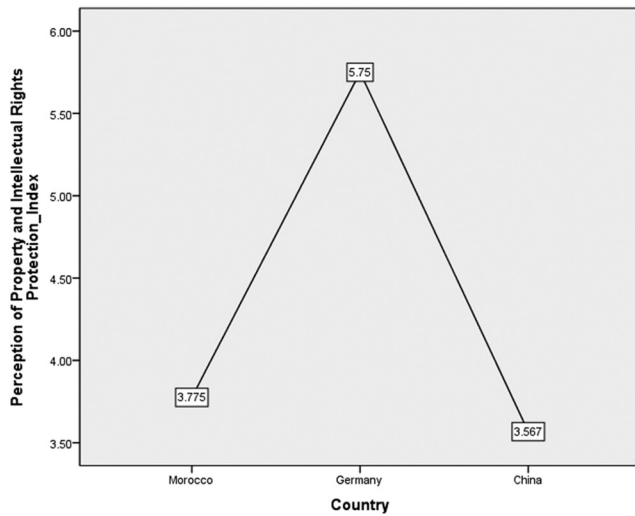


Figure 2. Perception of property and intellectual rights protection.

Table 5. Perception of corporate governance efficacy

| Morocco  |           | Germany  |           | <i>t</i> (175) | <i>p</i>    | Cohen's <i>d</i> |
|----------|-----------|----------|-----------|----------------|-------------|------------------|
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |                |             |                  |
| 4.97     | 1.50      | 5.58     | 1.23      | -12.30         | $p = 0.003$ | 0.45             |
| Germany  |           | China    |           | <i>t</i> (244) | <i>p</i>    | Cohen's <i>d</i> |
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |                |             |                  |
| 5.58     | 1.23      | 4.66     | 1.56      | 4.75           | $p < 0.001$ | 0.64             |
| Morocco  |           | China    |           | <i>t</i> (245) | <i>p</i>    | Cohen's <i>d</i> |
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |                |             |                  |
| 4.97     | 1.50      | 4.66     | 1.56      | 1.48           | $p = 0.140$ | 0.19             |

Note: Values are reported for two-tailed tests.

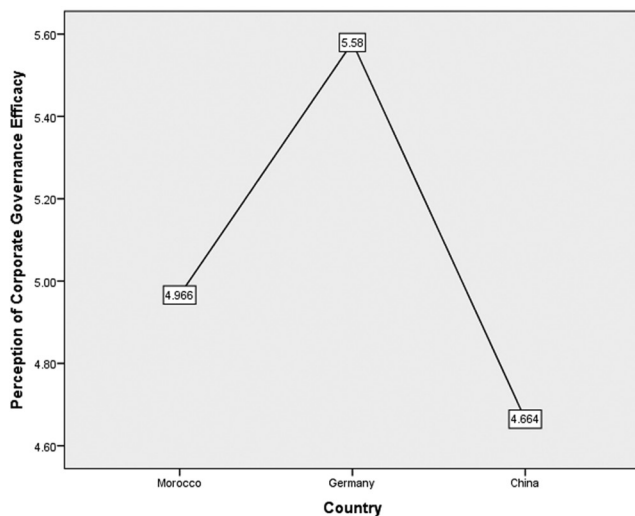


Figure 3. Perception of corporate governance efficacy.

German entrepreneurs evaluate the above-mentioned independent variables, which are facets of formal institutions as more positive and more efficient.

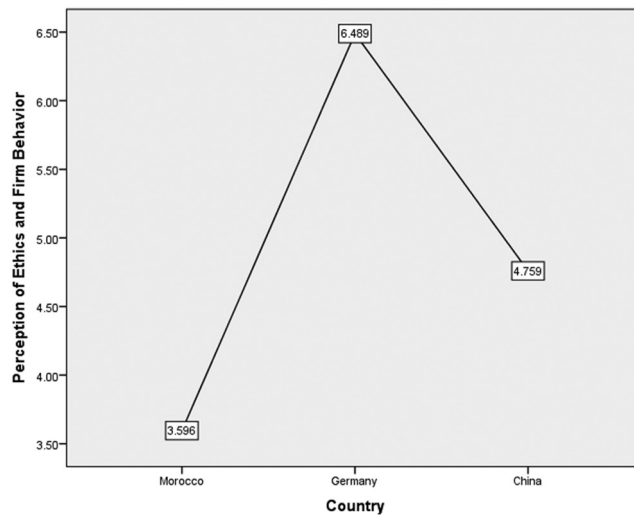
In the second step, participants were asked to which extent they perceive formal and informal institutions as a chance and/or as an inhibiting factor.

Significant differences were only found between Morocco and China ( $p = 0.003$ ). In the latter, formal institutions were perceived more as a chance. (Table 7 and Figure 5).

**Table 6.** Perception of ethics and firm Behavior

| Morocco  |           | Germany  |           |                |             |                  |
|----------|-----------|----------|-----------|----------------|-------------|------------------|
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | <i>t</i> (175) | <i>p</i>    | <i>Cohen`s d</i> |
| 3.59     | 1.40      | 6.48     | 10.04     | -2.69          | $p = 0.008$ | 0.50             |
| Germany  |           | China    |           |                |             |                  |
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | <i>t</i> (244) | <i>p</i>    | <i>Cohen`s d</i> |
| 6.48     | 10.04     | 4.75     | 7.66      | 1.51           | $p = 0.131$ | 0.19             |
| Morocco  |           | China    |           |                |             |                  |
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | <i>t</i> (245) | <i>p</i>    | <i>Cohen`s d</i> |
| 3.59     | 1.40      | 4.75     | 7.66      | -1.41          | $p = 0.157$ | 0.26             |

**Note:** Values are reported for two-tailed tests.



**Figure 4.** Perception of ethics and firm behavior.

**Table 7.** Perception of formal institutions as a chance

| Morocco  |           | Germany  |           |                |             |                  |
|----------|-----------|----------|-----------|----------------|-------------|------------------|
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | <i>t</i> (175) | <i>p</i>    | <i>Cohen`s d</i> |
| 4.40     | 1.61      | 4.81     | 1.25      | -1.92          | $p = 0.055$ | 0.29             |
| Germany  |           | China    |           |                |             |                  |
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | <i>t</i> (244) | <i>p</i>    | <i>Cohen`s d</i> |
| 4.81     | 1.25      | 5.02     | 1.56      | -1.06          | $p = 0.290$ | 0.15             |
| Morocco  |           | China    |           |                |             |                  |
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | <i>t</i> (245) | <i>p</i>    | <i>Cohen`s d</i> |
| 4.40     | 1.61      | 5.02     | 1.56      | -2.98          | $p = 0.003$ | 0.39             |

**Note:** Values are reported for two-tailed tests.

Regarding formal institutions as an inhibiting factor, differences were found between Germany and China ( $p < 0.001$ ), as well as between Morocco and China ( $p < 0.001$ ). In both cases, in China, formal institutions were perceived more as an inhibiting factor (Table 8 and Figure 6).

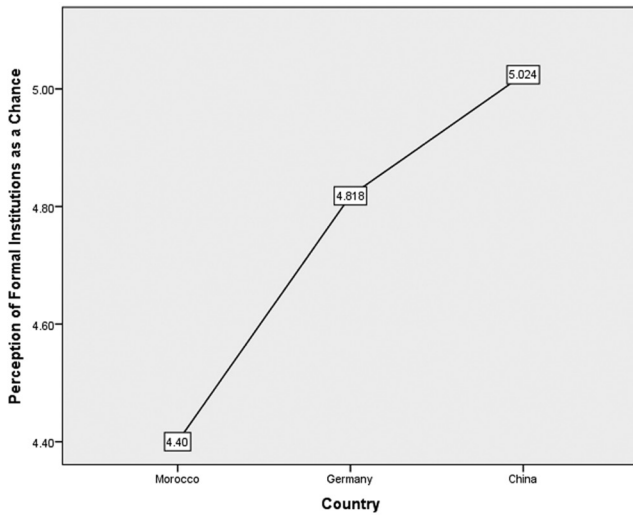


Figure 5. Perception of formal institutions as a chance.

Table 8. Perception of formal institutions as an inhibiting factor

| Morocco  |           | Germany  |           | <i>t</i> (175) | <i>p</i>    | Cohen's <i>d</i> |
|----------|-----------|----------|-----------|----------------|-------------|------------------|
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |                |             |                  |
| 3.97     | 1.56      | 4.03     | 1.35      | −0.310         | $p = 0.757$ | 0.04             |
| Germany  |           | China    |           | <i>t</i> (244) | <i>p</i>    | Cohen's <i>d</i> |
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |                |             |                  |
| 4.03     | 1.35      | 5.04     | 1.38      | −5.50          | $p < 0.001$ | 0.74             |
| Morocco  |           | China    |           | <i>t</i> (245) | <i>p</i>    | Cohen's <i>d</i> |
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |                |             |                  |
| 3.97     | 1.56      | 5.04     | 1.38      | −5.59          | $p < 0.001$ | 0.72             |

Note: Values are reported for two-tailed tests.

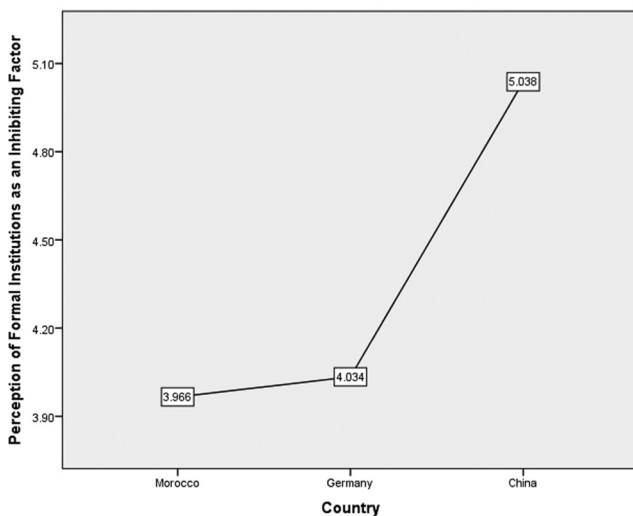


Figure 6. Perception of formal institutions as an inhibiting factor.

As for the perception of informal institutions as a chance, differences were found between Morocco and China ( $p = 0.013$ ). In China, they were perceived more as a chance than in Morocco (Table 9 and Figure 7).

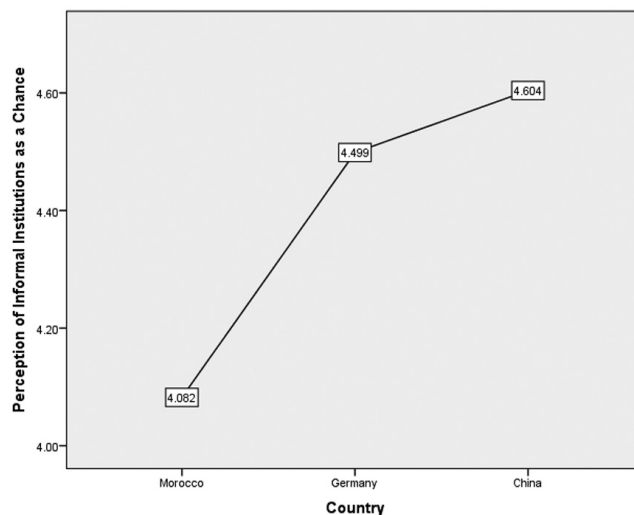
Regarding the perception of informal institutions as an inhibiting factor, differences were found between Morocco ( $p < 0.001$ ) and Germany and Germany and China ( $p < 0.001$ ). In Morocco and China, informal institutions were perceived as inhibiting factors (Table 10 and Figure 8).

Regarding the association of positive and negative perception of formal and informal institutions with self-efficacy, market orientation, and network orientation, Table 11 shows the results of linear regressions.

**Table 9.** Perception of informal institutions as a chance

| Morocco  |           | Germany  |           | <i>t</i> (175) | <i>p</i>    | Cohen's <i>d</i> |
|----------|-----------|----------|-----------|----------------|-------------|------------------|
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |                |             |                  |
| 4.08     | 1.74      | 4.50     | 1.25      | −1.72          | $p = 0.086$ | 0.28             |
| Germany  |           | China    |           | <i>t</i> (244) | <i>p</i>    | Cohen's <i>d</i> |
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |                |             |                  |
| 4.50     | 1.25      | 4.60     | 1.47      | −0.541         | $p = 0.589$ | 0.07             |
| Morocco  |           | China    |           | <i>t</i> (245) | <i>p</i>    | Cohen's <i>d</i> |
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |                |             |                  |
| 4.08     | 1.74      | 4.60     | 1.47      | −2.50          | $p = 0.013$ | 0.32             |

**Note:** Values are reported for two-tailed tests.



**Figure 7.** Perception of informal institutions as a chance.

**Table 10.** Perception of informal institutions as an inhibiting factor

| Morocco  |           | Germany  |           | <i>t</i> (175) | <i>P</i>    | Cohen's <i>d</i> |
|----------|-----------|----------|-----------|----------------|-------------|------------------|
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |                |             |                  |
| 4.40     | 1.58      | 3.34     | 1.27      | 4.89           | $p < 0.001$ | 0.75             |
| Germany  |           | China    |           | <i>t</i> (244) | <i>P</i>    | Cohen's <i>d</i> |
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |                |             |                  |
| 3.34     | 1.27      | 4.52     | 1.58      | −6.03          | $p < 0.001$ | 0.83             |
| Morocco  |           | China    |           | <i>t</i> (245) | <i>p</i>    | Cohen's <i>d</i> |
| <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |                |             |                  |
| 4.40     | 1.58      | 4.52     | 1.58      | −0.615         | $p = 0.539$ | 0.08             |

**Note:** Values are reported for two-tailed tests.

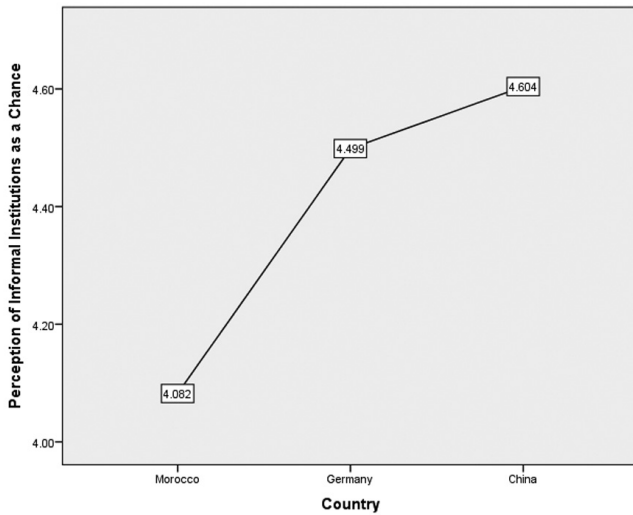


Figure 8. Perception of informal institutions as an inhibiting factor.

Table 11. Linear Regressions

| Independent variable         | Morocco                          |                                  |                     | China              |                    |                     | Germany                          |                    |                                  |
|------------------------------|----------------------------------|----------------------------------|---------------------|--------------------|--------------------|---------------------|----------------------------------|--------------------|----------------------------------|
|                              | Dependent variable               |                                  |                     | Dependent variable |                    |                     | Dependent variable               |                    |                                  |
|                              | Self-efficacy                    | Market orientation               | Network orientation | Self-efficacy      | Market orientation | Network orientation | Self-efficacy                    | Market orientation | Network orientation              |
| Formal mean index positive   |                                  | $\beta = 0.288$<br>$p = 0.017^*$ |                     |                    |                    |                     | $\beta = 0.263$<br>$p = 0.019^*$ |                    |                                  |
| Formal mean index negative   | $\beta = 0.315$<br>$p = 0.015^*$ |                                  |                     |                    |                    |                     |                                  |                    | $\beta = 0.272$<br>$p = 0.015^*$ |
| Informal mean index positive |                                  |                                  |                     |                    |                    |                     |                                  |                    |                                  |
| Informal mean index negative |                                  | $\beta = 0.314$<br>$p = 0.011^*$ |                     |                    |                    |                     |                                  |                    |                                  |

Note: \*Values are reported for significant two-tailed tests.

In Morocco, the positive perception of formal institutions is associated with market orientation ( $B = 0.371$ ,  $SE B = 0.153$ ,  $t = 2.429$ ,  $p = 0.017$  for two-tailed tests), and the negative perception of formal institutions with self-efficacy ( $B = 0.147$ ,  $SE B = 0.059$ ,  $t = 2.488$ ,  $p = 0.015$  for two-tailed tests). The negative perception of informal institutions is associated with market orientation ( $B = 0.444$ ,  $SE B = 0.172$ ,  $t = 2.587$ ,  $p = 0.011$  for two-tailed tests).

In China, no associations were found for formal and informal institutions (see Table 11).

In Germany, the positive perception of formal institutions is associated with self-efficacy ( $B = 0.103$ ,  $SE B = 0.043$ ,  $t = 2.387$ ,  $p = 0.019$  for two-tailed tests). The negative perception of formal institutions is associated with network orientation ( $B = 0.578$ ,  $SE B = 0.234$ ,  $t = 2.475$ ,  $p = 0.015$  for two-tailed tests).

## 5 Discussion

In Morocco, informal institutions were perceived more as inhibiting factors.

This could be a result of a biased approach of the participants who tried to avoid stating the existence of large-scale corruption in their country.

In China, ambiguity is the core element since both institutional types were perceived as a chance and as an inhibiting factor to the same extent. This may indicate that the perception is affected by the individual

access to “Guanxi”. According to Zhang and Zhang [2006: 376] “Guanxi” affects both inter-organizational and interpersonal factors and sometimes the lines between the two types become blurred as e.g., inter-organizational networks often behave as interpersonal ones [Zhang and Zhang, 2006: 385]. It could also reflect the change in China’s corporate culture as managers become more individualistic and independent in their decision-making. Chinese entrepreneurs hold on to their traditional values while trying to simultaneously incorporate Western values in their organizational cultures [Allik and Realo, 2004]. Thus, our first hypothesis was only partly confirmed.

In Germany, the view of both types of institutions is more positive. Therefore, our second hypothesis was falsified.

This finding could reflect the perception of the coexistence of formal and informal institutions as efficient. Besides, another reason could be that when an increased incongruence between formal and informal institutions exists, it is more likely for entrepreneurs to operate informally. Moreover, it could be the case that the majority of German survey participants work for firms in the early stage of development. In this stage of entrepreneurship, relationships often consist of social bonds, i.e., informal contacts, and as a firm reaches the next stage of development, entrepreneurs have to transform loose informal contacts into business relationships [Mitrega et al., 2011: 11].

Our results further indicate that, in Morocco, there is an association between positive perception of formal institutions, negative perception of informal institutions, and market orientation. This could go hand in hand with an orientation toward networks. In China, no such association was found.

Therefore, our third hypothesis was only confirmed in the case of Morocco.

There is an association between the negative perception of formal institutions in Morocco and self-efficacy. This result indicates that the ones who don’t prefer formal institutions could provide effective outcomes on some occasions.

In Germany, the positive perception of formal rules is associated with self-efficacy and the negative perception of formal institutions is associated with network orientation.

Thus, our fourth hypothesis could only partly be confirmed in the case of Germany, where the negative perception of formal institutions is associated with network orientation.

One limitation of this study is its reliance on the perception of participants, which could be biased by overoptimistic factors or the effects of social desirability. An additional drawback is that the answers of the participants could reflect differences in response styles. Moreover, because of the “bounded rationality” of the participants who only possess incomplete and asymmetrical information and exchange of information performed between actors who do not share the same values or cognitive frameworks, it is difficult to rely on the perception of institutions. Furthermore, the problem with the use of variables of the WEF is that they could be based on a misconception directed toward the ineffectiveness of formal institutions, manifested by poor implementation of formal rules. However, the weak application of the formal institutional framework does not necessarily mean that there is an informal institutional framework in place. Moreover, it can be the case that the negative perception of formal rules acts like an indicator for informal institutions because the drawbacks of the formal institutions are indicated.

Future studies could examine whether these results reflect real perceptions or rather differences in response styles. Moreover, future research could investigate the influence of formal and informal institutions on the strategic orientation of entrepreneurs by taking into account psychological and cultural factors as moderators of the potential influence.

Nevertheless, contrary to the logic, which states that informal institutions exist to fill the gaps of formal institutions, our research could demonstrate that economic actors involved in economic activities are embedded within a social context. This fact makes informal rules inevitable as they do not disappear with the introduction of formal institutions.

Similarly, Charles et al. [2018: 397] state that since informal institutions are being constructed over time through social interactions, their effects are difficult to change.

Informal institutions can only be limited to some extent. This could also be understood positively since excessive regulation or even rigid conformity to formal rules is considered to be bureaucratic and often hinders or prevents fast action and decision-making processes.

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