Natural resource revenue management and its critically important institutional factors: The Case of Peru

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* 1. Introduction

The topic of natural resource curse has been widely discussed since the negative relationship between natural resource abundance and economic growth was empirically proved by Sachs and Warner (1995). Various explanations of this negative relationship were provided, researchers and scientists pioneered different approaches towards this issue. Firstly, theories explained this phenomena by existence of the Dutch disease (e.g. Torvik, 2002) highlighting the fact that a boom in extractive sector leads to worse performance of non-extractive sectors. Other researchers enhanced role of taxation and government performance in this field (e.g. Busse, Gröning, 2011), other studies highlighted the role of commodity prices volatility (Cavalcanti et al., 2012; Addison, Roe, 2018). Besides these approaches, the institutional aspects and their impacts on natural resource management tend to prevail nowadays as crucial factors of the way how natural resources are governed. Academic papers aim at influence of individual institutional factors on natural resource governance, such as rule of law (Bulte et al. 2005; Murshed 2004), corruption (Bhattacharyya, Hodler 2009; Torvik 2001) or violent conflicts (Collier, Hoeffler 2004; Humphreys 2007; Cuvillier, Kannan 2019). These individual institutional factors create a complex background which influences the natural resource management. Unfortunately, though, most authors have examined the influence of institutional factors in isolation, which means that we do not have enough knowledge about the influence of complex institutional background on natural resource management. There are, however, rare exceptions (e.g. Smělá, Sejkora 2022).

This paper builds on previous research by Smělá and Sejkora (2021; 2022), who focused on identifying which specific institutional factors (and their combinations) across the system are key to good (or bad) natural resource management. It aims to evaluate their general findings on a specific country as a case study. That country is Peru, for which the extractive industry is a very important economic sector. However, it should be stressed that since Smělá and Sejkora's (2021; 2022) research is limited to only one part of natural resource management, i.e. revenue management, this case study also addresses only revenue management.

The rest of the paper is organised as follows: research framework provides a general background for the case-study of Peru. It summarizes key findings regarding the importance of various institutional factors and their combinations for good (or bad) revenue management. Next two sections provide information on resource revenue management and evaluate institutional background in Peru. Discussion section aims at contrasting the adopted natural resource revenue governance in Peru and the general background found out in existing literature. Final section concludes.

2. Research framework

Following the example of Smělá and Sejkora (2021; 2022), this paper employs a framework developed by Natural Resource Governance Institute (NRGI, 2023a). NRGI works with the so-called Resource Governance Index (RGI) measuring quality of governance in gas, oil, and mining sectors on a scale of 0 to 100 (with 100 being perfect) — showed in table 1). The RGI consists of three sub-indices: Enabling Environment; Value Realization; Revenue Management. Enabling Environment includes seven institutional factors (open data; political stability and absence of violence; control of corruption; rule of law; regulatory quality; government effectiveness; voice and accountability) that together form a complex institutional system, which affects each country's natural resource management. The framework then divides management itself into two parts - Value Realization and Revenue Management. As mentioned in the Introduction, the following text focuses on Revenue Management only as we do not have any general findings regarding which institutional factors and their combinations are crucial for high level of Value Realization. Regarding the Revenue Management, NRGI's framework distinguishes three dimensions — national budgeting; subnational resource revenue sharing and sovereign wealth funds.

Based on the results of fuzzy-set qualitative comparative analyses conducted by Smělá and Sejkora (2021; 2022), it appears that individual institutional aspects have a diverse impact on resource revenue management. For this reason, the institutional background should not be viewed as a general factor, it should be rather decomposed to its individual factors to find out their impacts, respectively impacts of combinations of institutional factors (see figure 1). The conducted research found out necessary institutional aspects to reach high (or low) levels of resource revenue management as well as consistent pathways to these outcomes. The main findings of the research, which will be evaluated on the case of Peru, are summarised below:

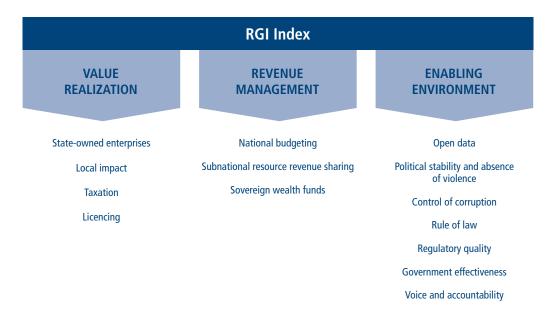
- High level of voice and accountability is a necessary condition for achieving positive outcomes in terms of revenue management, making this institutional factor crucial. This applies to both national budgeting & sovereign wealth funds.
- Political stability and absence of violence is an irrelevant condition. This means that high level of this institutional factor is not necessary for

Table 1 » RGI score levels

RGI score	Governance level
>74	good level
60–74	satisfactory level
45–59	weak level
30–44	poor level
<30	failing level

Source: Natural Resource Governance Institute (2023a)

Figure 1 » Decomposition of the Resource Governance Index



Source: Natural Resource Governance Institute (2023a)

- achieving positive outcomes in terms of revenue management.
- Well-functioning sovereign wealth funds represent the biggest challenge in terms of any country's institutional background, as high levels of six out of seven institutional factors are a necessary condition for achieving positive outcomes in this regard. The only exception is political stability and absence of violence, which seems irrelevant, as was already mentioned.
- There are two consistent pathways to high levels of national budgeting & subnational resource revenue sharing. High levels of voice and accountability; government effectiveness; regulatory quality; rule of law; control of corruption & data openness or combinations of these institutional factors should be present.
- Absence of government effectiveness; rule of law & control of corruption leads to unsatisfactory outcomes in terms of national budgeting.

- Absence of open data & control of corruption leads to unsatisfactory outcomes in terms of subnational revenue sharing.
- There are two consistent pathways to low levels of revenue management. Low level of resource revenue management is reached if all the institutional aspects are absent. This applies to all three dimensions of revenue management. In terms of national budgeting and subnational revenue sharing, unsatisfactory outcomes can be also reached by presence of all institutional factors excluding open data. The same pattern is valid for sovereign wealth funds, however, two additional configurations of institutional aspects can also generate low level of governance. It is either presence of all institutional factors or presence of all institutional aspects excluding political stability and absence of violence.

3. Theoretical background

3.1 The resource revenue management in Peru

Peru ranks among one of the fastest growing economies in Latin America. It is a global leading country in mining sector as the country is one of the most prominent producers of copper, silver, lead, zinc, molybdenum and tin. The mineral deposits are found especially in mountain areas of the country. Mining sector has been dominating the economy for many decades.

In 2021, the production of minerals rose, and it reached almost the amount before COVID-19 pandemic. Peru was the top world producer of zinc, lead and tin, it held the second position in gold, copper and silver production (Ministerio de Energía y Minas, 2022). In the last decade mineral export contained on average 59.6% of total exports, the total amount of mineral exports in 2021 was USD 63.106 billion (Ministerio de Energía y Minas, 2022). The top three exporting mineral commodities in 2021 were copper (32.8%), gold (16%) and zinc (4.1%). Most minerals are headed to China (47.6% in 2021) which is followed by India and Canada (7.1%, respectively 6.4%, in 2021) (Ministerio de Energía y Minas, 2022).

The natural resource sector and its activities are very important for the country, as it generates a prominent part of GDP as well as fiscal revenues. Moreover, it creates both direct and indirect jobs which are crucial for labour market in the Peruvian mining areas. In 2021, almost 228 thousand direct jobs were available in the mining sector (Ministerio de Energía y Minas, 2022).

Peruvian Ministry of Energy and Mines (MI-NEM), an authority responsible for mining activities, runs an online information portal called *Portal de Transparencia* providing many pieces of information about mining issues. Its coverage is quite broad, it provides general data on valid legislation in the sector as well as more specific information on natural resource reserves, production,

fiscal revenues, or export of the mining sector. The portal is publicly available for free. Moreover, it covers not only the latest period, it provides information from years 2015/2017 depending on individual piece of information (Ministerio de Energía y Minas, 2023a).

Resource revenue governance is extremely important regarding transparency considerations as the natural resource sector plays a crucial role in the Peruvian economy. In 1990s Peru's public finances were not managed in a good way and Peru was one of the worst performing countries in this field in Latin American region. However, local authorities took a series of policy measures and a radical adjustment of public finances started in 1993. A few fiscal stabilization packages and reforms were implemented, however, they were changed quite frequently. Alongside with a lack of compliance on subnational levels, the effectiveness of fiscal policy was reduced. The most recent fiscal reform occurred in 2015 when enactment of the Law to Strengthen Fiscal Responsibility and Transparency took effect (Mendoza et al., 2021). One of the main objectives of the amendment was to limit the impact of resource revenue volatility on the local

The current law sets numerical spending limits for the general government to determine ceilings for the national and subnational governments. In addition, it sets debt rules for different levels of government as well as other specific rules, e.g. restrictions on external borrowing or requirements on permanent spendings (Palomba et al., 2015). The fiscal policy and fiscal rules are regularly reported since 2005 on the level of central government and NFPS, reporting on subnational level is not monitored regularly as report provision is not required.

Generally, the budgeting process covers revenue, expenditure and financing which is structured into national, regional, and local government. It also monitors all flows of financial resources between various governmental levels. However, its coverage is limited in certain points,

especially taking into consideration the fact that it does not reflect some natural resource revenues, the ones retained by PetroPeru (Palomba et al., 2015). Macroeconomic projections regarding budget and its parts are published. They include both current and three year forecasts on the main economic indicators with a commentary and macroeconomic scenarios are provided. The forecasts are updated annually, usually in August (Palomba et al., 2015). One-year projections tend to be relatively accurate compared to long term ones which are more conservative (IMF, 2023).

Regarding subnational resource revenue sharing, so called canon minero system is applied in Peru. Canon minero comprises 50% of corporate income tax collective from companies active in extractive sector. Alongside with mineral royalties and annual sub-surface fee, almost 95% of total resource revenues is transferred to subnational levels. The remaining 5% is allocated to public universities within the production regions (Aresti, 2016). This system ensures that a certain part of resource revenues is transferred to subnational levels. However, the amount of shared revenue is dependent on location where extractive industries are operating. The financial resources gained through canon minero are transferred according to the extraction location as follows, i) 10% of resources heads to municipalities at district levels, ii) 25% heads to municipalities at provincial levels, iii) 40% heads to departments and iv) 25% heads to regional governments (Ministerio de Economía y Finanzas, 2023).

As the natural resource prices were growing, the transfers increased significantly which made effective allocation difficult. Nowadays, the resource revenue sharing creates inequality between individual regions as majority of transfer from *canon minero* is concentrated in six of total 25 regions. These regions are Ancash, Tacna, Cusco, Cajamarca, Moquegua and Paasco, however, they represent only 16% of Peruvian total population. In addition, the way how the resources gained from *canon minero* is specified by legal framework. Public invest-

ments can be funded to the amount of 80% of gained sources, remaining 20% can be used for maintenance spending (Ministerio de Economía y finanzas, 2023; Aresti, 2016).

Regarding disclosure of resource revenue sharing, the general information on legislation and applicable rules is publicly available on national government websites. More precise information on calculations of redistribution indices and disaggregated information misses. On the other hand, transfers made to subnational levels are disclosed monthly, alongside with expenditures of subnational governments (Ministerio de Economía y finanzas, 2023; Aresti 2016). In case the gained resource revenue is not spent by the subnational government in a respective year, they are tracked with difficulties in the ongoing years, which can be seen as a transparency shortcoming. The data disclosure by individual regional governments is very rare, only a few regions, e.g. Piura or Moquegua, publicly provide information on received and spent financial resources on individual projects from canon minero.

Peru implemented a fiscal stabilization fund as it has one natural resource fund. Unspent ordinary revenue of the national government is put into the fiscal stabilization fund. Moreover, 10% of concessional fees and privatization proceeds are transferred to the fund. The resources from the fund should be used when ordinary revenues of national government fall by more than 0.3% of GDP below previous year revenues as well as in emergency situations and international crises. As far as 50% of income tax paid by extractive companies heads to the national budget, it can be assumed that a certain part of resource revenues goes into this fund. However, it is not possible to separate the general revenues from resource ones.

3.2 The institutional background in Peru

Generally, Peru ranks among countries with higher levels of institutional background in Latin Amer-

Resource revenue governance is extremely important regarding transparency considerations as the natural resource sector plays a crucial role in the Peruvian economy. In 1990s Peru's public finances were not managed in a good way and Peru was one of the worst performing countries in this field in Latin American region. However, local authorities took a series of policy measures and a radical adjustment of public finances started in 1993. A few fiscal stabilization packages and reforms were implemented, however, they were changed quite frequently. Alongside with a lack of compliance on subnational levels, the effectiveness of fiscal policy was reduced. The most recent fiscal reform occurred in 2015 when enactment of the Law to Strengthen Fiscal Responsibility and Transparency took effect. One of the main objectives of the amendment was to limit the impact of resource revenue volatility on the local budget.

ican continent. Over the past fifteen years, Peru has experienced a period of political and economic stability, however, socioeconomic inequalities remained still quite high in comparison to OECD average.

The country reaches percentile ranking of 53.62 in voice and accountability dimension according to Worldwide Governance Indicators in 2021 (World Bank, 2023). It means it keeps a stable ranking in the dimension since 2011, however, there is certain space for improvement. The country should establish more responsive and accountable public administration including government, public sector as well as public finance system. These findings correspond to the public governance reforms for Peruvian territory by OECD (OECD, 2016a). Peruvian government is not open enough to provide a vision linked to principles of accountability and participation of citizens.

Regarding the government effectiveness in Peru, the country suffered from a few political crises in last five years. It resulted in changing presidents six times during this period. Tensions between president and congress significantly hampered government effectiveness. Political fragility and high fragmentation of political system are the biggest challenges in the context of Peruvian govern-

ment effectiveness. Weaker position of the government can potentially lead to applying of fiscal populism and expansionary spending in Peru which threatens government effectiveness. Such actions can result in positive effects in a short run, on the other hand, their effects in a long run are rather destructive. The government effectiveness in Peru has experienced a decreasing trend according to Worldwide Governance indicators. In 2021, the rating of Peru in the dimension was 41.35 compared to 2011 when it reached 47.87 (World Bank, 2023). For this reason, Peru should address the limitations in government effectiveness. It is also important to highlight the effectiveness of local governments and their expenditures. It was proved that in Peru, local governments tend to be more effective in times when they are favoured by mineral prices boom. On the other hand, local governments are less efficient when the mineral prices are lower and fiscal transfer is more modest. This fact is explained by the increase of political competition connected to the boom (Ardanaz, Maldonado, 2016).

Regarding regulatory quality in Peru, the country does not apply a policy statement for application of whole-of-government regulatory policy. Moreover, the regulatory activities are delegated to

national, regional and local levels of government. Regarding mining industry, the general legal settings are set by national government, however, legal powers in this field are shared between the national and regional governments. Moreover, local governments have faculties to modify it in accordance with national regulation (OECD, 2016b). Peru applies legislation on regulatory quality as the Framework Law for Legislative Production and Systematization is present in the country. This act plays a crucial role in regulatory quality as it provides standards and guidelines of Peruvian laws (OECD, 2016b) and it ensures regulatory quality. Peru applied National Competitiveness Agenda between 2014 and 2018 to enhance competitiveness thanks to higher regulatory quality in the country. One of the main strategies of this agenda is to simplify as many formalities in the sector as possible (OECD, 2016b). There is a regulator of Peruvian natural resource industry called Organismo Supervisor de la Inversión en Energía y Minería (Osinergmin). Osinergmin was established in 1997 and its role is, among others, to supervise regulation and regulatory standards in the industry (OECD 2019). Peru achieved score of 42.9 in 2021 in terms of regulatory quality (World Bank 2023). Compared to previous years, the trend is rather a decreasing score. Taking into consideration the score of regulatory quality in Resource Governance Index, Peru has experienced slight progress in the score as it reached score of 89 (NRGI, 2023a; 2023b) in 2021 evaluation.

The topic of corruption and control of corruption is another important institutional aspect when analysing the institutional background. In this context, Peru encouraged many reforms in 1990 s, however, it still has some limitations to perform in a good way. Basically, the whole mining process is vulnerable to corruption affaires as some vulnerabilities exist in all its stages. The corruption risk that interest groups can promote candidacies is very high (Proetica, 2019) because of financing political candidates by these groups. According to the research by Proetica (2019), possibility of corrup-

tion is enhanced by the phenomena of revolving door, it means high rotation of officials in senior positions. Generally, the lack of effective and efficient systems in natural resource processes creates space for corruption affaires. It is supported by high levels of decentralization leading to political fragmentation (Proetica, 2019). Insufficient institutional capacity promotes circumstances allowing corruption to occur. This fact can be illustrated for example on the distribution of financial resources from the canon minero system. A part of money earned by the government is distributed to the regional levels which distributes it to the final destination, which creates space for corruption. Dimension of corruption is one of the weakest one from the point of view of Resource Governance Index. Its score is only 58, alongside with limitations in the scope of rule of law, the country is not able to benefit from the mining sector as much as it is possible. The control of corruption index according to the Worldwide Governance Indicators reaches 28.6 in 2021 which corresponds to the fact that Peru has made a significant progress up to now.

Political stability is a key to more inclusive and higher economic growth promoting both poverty and inequality reduction. According to research, 43% of surveyed indicated that political parties in Peru are weak which creates an obstacle for establishment of minimal conditions for political stability. In addition, it is proved that there is a positive correlation between political stability and public governance (Almirano et al., 2023). Moreover, this study proved that political polarization between political actors creates uncertainty in all sectors of the economy and it results in a political crisis. Concerning political stability, Peru reached score 33.5 in 2021 compared to 20.4 in 2013. Obviously, there is a space for improvement in this context. From the point of view of Resource Governance Index, Peru scored 69, it means slightly better result than in the previous evaluation.

Connections between political stability and rule of law are very tight (Iheonu et al., 2021), this pattern is valid also in the case of Peru. The study

performed by Almirano et al. (2023) proved that political actors in Peru are perceived to have weak democratic management which consequently leads to lower levels of rule of law. As far as political stability increases rule of law scores, if the corruption is controlled through effective government (Iheou et al., 2021), the lower levels of rule of law are also supported by the corruption levels in Peru. Rule of law score according to the Worldwide Governance Indicators reached 32.38 in 2021 (World Bank, 2023). This indicator has kept the same score since 2009 with some insignificant oscillations. Regarding the results of this index in Resource Governance Index, rule of law alongside with control of corruption rank among two dimensions with the lowest scores in evaluation.

Open data related to transparency and accountability is closely related to all above mentioned dimensions of institutional background. Open data is key for understanding of mining activities by all the stakeholders including local communities and citizens. Access to information in Peru is granted by the Law on Transparency and Access to Public Information. Moreover, Peru is a member country of Extractive Industries Transparency Initiative (EITI), a global standard for good governance in mining industries. The main goal of membership in this institution is to enhance transparent management in all the aspects of the mining procedures. Generally, open data and transparency has been promoted in Peru in last decades, the same pattern is valid for data openness in mining sector. Open data reaches score of 79 in Resource Governance Index, which is an increase compared to the previous evaluation in 2017 (NRGI, 2023).

4. Discussion and policy implications

Based on the above-mentioned information and the research performed by Smělá, Sejkora (2022), this section of the paper covers discussion about the settings of natural resource revenue management in Peru in the context of local institutional background.

As the research confirmed that voice and accountability is a necessary condition in terms of national budgeting and resource revenue sharing for reaching a higher level of natural resource revenue management, Peru reaches score of 82 in voice and accountability (NRGI 2023), which ranks the country among the best performers in this field. Transparency is promoted in the whole mining process from mining licences allocation to tax revenue redistribution. Generally, the mining transactions are considered to be clear and transparent which is also outlined by the World Bank (2021).

In terms of sovereign wealth funds, six necessary conditions were proved to reach a higher level of natural resource management, i.e. the presence of all the institutional aspects excluding political stability and absence of violence. Peru is in accordance with the findings of research as all these conditions are present in a certain way.

It can be stated that Peru fulfils one of the necessary conditions to generate higher levels of natural resource management. However, the country should continue to apply policies encouraging transparency and accountability to reach even better results in natural resource revenue management. The major space for improvement can be found especially in the environmental aspect of mining where the transparency still lags behind.

The research done by Smělá and Sejkora (2022) confirmed one configuration of conditions leading to a good natural resource revenue management which is the presence of all the conditions of the institutional background. Analysing the case of Peru, the enabling environment reaches score of 72 and all its factors reach more than average scores. For this reason, it can be claimed that the level of each institutional factor is satisfactory in Peru. This leads to an overall satisfactory performance in terms of revenue management. The most problematic dimensions of enabling environment are rule of law and control of corruption, however, together with the performance in other aspects, a positive outcome is reached.

The research revealed one consistent pathway to generate higher level of revenue governance in case of Peru. In terms of national budgeting and subnational resource revenue sharing the conditions of voice and accountability, government effectiveness, regulatory quality, rule of law, control of corruption and data openness or their combination should be present to reach a higher level of resource revenue governance. In the case of Peru, these assumptions are fulfilled as the country reaches more than average scores in all these aspects. As a result, the country performs in resource revenue governance in a good way.

To get a complex of view, conditions or their combinations leading to a lower level of resource revenue management should be reviewed as well. In this context, the research by Smělá and Sejkora (2021) revealed that in terms of national budgeting, absence of government effectiveness, rule of law and control of corruption worsen the quality of natural resource governance. Having a look at Peruvian case, the national budgeting reaches very high score of 99, despite rule of law and control of corruption are two of worst performing institutional factors. However, as far as all of these three institutional factors are present to a certain extent, the findings of the research are confirmed.

In terms of subnational resource revenue sharing, the absence of control of corruption and absence of open data generate lower levels of resource revenue governance. In this context, it can be stated that Peru performs on the average score in terms of control of corruption which can hinder the performance of subnational resource revenue sharing.

Regarding the pathways to reach lower levels of resource revenue management, two consistent pathways were identified (Smělá, Sejkora, 2021). Firstly, the absence of all the institutional aspects generates the negative results of natural resource governance which is not definitely case of Peru as it can be seen from the values of Resource Governance index and its individual components. Secondly, the presence of all the institutional aspects ex-

cluding open data generates lower level of resource revenue management. This finding can be interpreted as high importance of open data in terms of subnational resource revenue sharing. In Peru, the open data aspect is evaluated by score of 79 and subnational resource revenue sharing by score of 62. These interconnections confirm the abovementioned pathway to generation of lower levels of resource revenue governance.

With regard to sovereign wealth funds, as far as any necessary condition was found out in the research (Smělá, Sejkora, 2021), it can be stated that sovereign wealth funds are too complex which is also highlighted in the existing literature (e.g. Torvik 2001). However, the research proved that the importance of presence of both open data and political stability is needed as a consistent pathway cannot be reached without presence of these two aspects.

5. Conclusion

The paper aims at the topic of natural resource revenue management in relation to institutional background in the context of an individual country, which is Peru. Its main purpose is to apply the findings from previous papers focused on mutual relations between natural resource revenue governance and institutional background on the case of Peru. It means to find out if the institutional background and revenue management in Peru is or is not in accordance with findings from existing papers.

Firstly, a research framework was provided to set up a general background. It presented major findings regarding conditions of institutional background, or their combinations, resulting in higher, respectively lower, levels of resource revenue governance. Following the previous chapter, a part of the paper identifying the settings of resource revenue governance in Peru is presented. It describes the settings of three basic dimensions of resource revenue governance, i.e. national budgeting, subnational revenue sharing and sovereign wealth

funds. Generally, it can be stated that Peru applies numerous policies in resource revenue management which further interconnect with local institutional background. The following section of the paper provided information on Peruvian enabling environment, meaning institutional background, in the form of open data, political stability and absence of violence, control of corruption, rule of law, regulatory quality, government effectiveness and voice and accountability. To sum up the institutional background in Peru, it is based on recommended principles, however, there are still some parts of it where the improvement is needed, especially in rule of law and control of corruption.

Finally, the section regarding discussion was presented. It puts into context the findings of the conducted research with the settings of natural resource revenue management and local enabling environment. Regarding necessary conditions, comparison of existing general findings and the current status of natural resource revenue governance and enabling environment in Peru proved that all the identified necessary conditions, meaning voice and accountability in terms of national budgeting and absence of political stability and violence in terms of subnational resource revenue sharing, are fulfilled in Peruvian case which enables the country to generate higher levels of resource revenue management as it is shown in Resource Governance Index. In addition, the provided discussion also confirmed that the identified pathways to higher, respectively lower, levels of revenue governance are valid in Peru. This means that Peruvian case is in accordance with existing findings on the relation between institutional factors and revenue management.

REFERENCES

- [1] ADDISON, T., ROE, A. 2018. Extractive industries: The management of resources as a driver of sustainable development. Oxford University Press.
- [2] ALMIRANO A. E. F. et al. 2023. Political stability and public governance in Peru. *Social Space*, 23(1), 265–291.
- [3] ARDANAZ, M., MALDONADO, S. 2016. *Natural resource windfalls and efficiency of local government expenditures: Evidence from Peru*. Documentos De Trabajo 014578, Universided del Rosario. [online]. [cit. 2024-01-04]
- [4] ARESTI, M. L. 2016. *Mineral revenue sharing in Peru*. Natural Resource Governance Institute. [online]. [cit. 2024-01-04] Available at https://resourcegovernance.org/sites/default/files/documents/mineral-revenue-sharing-in-peru 0.pdf
- [5] BHATTACHARYYA, S., HODLER, R. 2009. Natural resources, democracy and corruption. *European Economic Review*, 54(4), 608–621. 10.1016/j.euroecorev.2009.10.004
- [6] BULTE, E. H. et al. 2005. Resource intensity, institutions, and development. *World Development*, 33(7), 1027–1044. 10.1016/j.worlddev.2005.04.004
- [7] BUSSE, M., GRÖNING, S. 2011. The resource curse revisited: governance and natural resources. *Public Choice*, 154(1), 1–20. 10.1007/s11127-011-9804-0
- [8] CAVALCANTI, T. V. et al. 2012. Commodity price volatility and the sources of growth. IMF Working Paper
- [9] COLLIER, P., HOEFFLER, A. 2004. Greed and Grievance in civil War. *Oxford Economic Papers*, 56, 563–595. 10.1093/oep/gpf064
- [10] CUVILLIER, E. F., KANNAN, S. P. 2019. *EITI as an instrument of fiscal transparency and accountability: A case study of two FCV countries.* Governance Notes, The World Bank.
- [11] HUMPHREYS, M. 2007. Natural resources, conflict, and conflict resolution. *Journal of Conflict Resolution*, 49(4), 508–537. 10.1177/0022002705277545

- [12] IHEONU, CH. O. et al. 2021. Democracy and lifelong learning in Africa. AGDI Working Paper, No. WP/22/067. African Governance and Development Institute.
- [13] IMF. 2023. Peru world economic outlook. [online]. [cit. 2024-01-04] Available at https://www.imf. org/external/datamapper/profile/PER
- [14] MENDOZA, B. et al. 2021. Fiscal Rules and Public Investment: The Case of Peru, 2000-2019. IDB Working Paper Series. 10.18235/0003018
- [15] MINISTERIO DE ECONOMÍA Y FINANZAS. 2023. Canon. [online]. [cit. 2024-01-04] Available at https://www.mef.gob.pe/es/?option=com_content&language=es-ES&Itemid=100959&lang=es-ES&view=article&id=454
- [16] MINISTERIO DE ENERGÍA Y MINAS. 2022. 2021 anuario minero, reporte estadístico. [online]. [cit. 2024-01-04] Available at https://cdn.www.gob.pe/uploads/document/file/3282284/Anuario2021. pdf.pdf?v=1666789635
- [17] MINISTERIO DE ENERGÍA Y MINAS. 2023. Ministerio de energía y minas Portal de transperencía. [online]. [cit. 2024-01-04] Available at https://www.gob.pe/minem
- [18] MURSHED, S. M. 2004. When does natural resource abundance lead to a resource curse? EEP Discussion Paper 04-01. International Institute for Environment and Development
- [19] NRGI. 2023a. 2021 resource governance index. [online]. [cit. 2024-01-04] Available at https:// resourcegovernanceindex.org
- [20] NRGI. 2023b. Country profiles. [online]. [cit. 2024-01-04] Available at https://resourcegovernanceindex.org/country-profiles/PER/mining?years=2021
- [21] OECD. 2016a. Regulatory policy in Peru: Assembling the framework for regulatory quality. OECD Reviews of Regulatory Reform, OECD Publishing, Paris. 10.1787/9789264260054-en
- [22] OECD. 2016b. Directorate for public governance. [online]. [cit. 2024-01-04] Available at https://www. oecd.org/gov/public-governance-review-peru-highlights-en.pdf
- [23] PALOMBA, G. et al. 2015. Peru Fiscal Transparency Evaluation. IMF Country Report No. 15/294 [online]. [cit. 2024-01-04] Available at https://www.imf.org/external/pubs/ft/scr/2015/cr15294.pdf
- [24] PROETICA. 2019. Corruption risks in the mining sector: Peru report. [online]. [cit. 2024-01-04] Available at https://www.proetica.org.pe/wp-content/uploads/2019/02/estudio-mineria-ingles-proetica.pdf
- [25] SACHS, J. D., WARNER, A. M. 1995. Natural resource abundance and economic growth. National Bureau of Economic Research Working Paper Series. 5398
- [26] SMĚLÁ, M., SEJKORA, J. 2021. Natural resource revenue management from global perspective: Critically important institutional factors. In The 21st International Scientific Conference Globalization and its Socio-Economic Consequences 2021, 1-12. 10.1051/shsconf/202112909020
- [27] SMĚLÁ, M., SEJKORA, J. 2022. Natural resource revenue management: Which institutional factors matter? Review of Economic Perspectives, 22(1), 3-23. 10.2478/revecp-2022-0001
- [28] TORVIK, R. 2002. Natural resources, rent seeking and welfare. Journal of Development Economics, 67(2), 455-470. 10.1016/S0304-3878(01)00195-X
- [29] WORLD BANK. 2021. Mining sector diagnostic Peru. [online]. [cit. 2024-01-04] Available at World Bank Document
- [30] WORLD BANK. 2023. Worldwide governance indicators. [online]. [cit. 2024-01-04] Available at https://info.worldbank.org/governance/wgi/Home/Reports



→ ABSTRACT

The topic of natural resources has been widely discussed since the negative relationship between natural resource abundance and economic growth was empirically proved. Many scientists believe that this negative relationship is caused by institutional factors presented in a country rich in natural resources. The objective of the paperis to evaluate the individual institutional aspects and their impact on either good or bad natural resource management in Peru. A case study approach is used to fulfil this aim, i.e. that further details of institutional background in Peru are researched in the context of natural resource revenue management. Based on the conducted research, it can be stated that Peru performs in a good way regarding natural resource management as the existence of pathways to higher levels of natural resource management was proved. However, there is still some space for improvement in the context of rule of law and control of corruption.

KEYWORDS

Natural Resources; Management of natural resource; Qualitative Comparative Analysis; Peru

JEL CLASSIFICATION

Q38; H2; H3