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Making wealth sharing more efficient in high-rent countries: the citizens' income

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Abstract This paper argues that hydrocarbon producers with high rents per capita constitute a specific category in the broader universe of rent-dependent countries, facing a specific set of development challenges that are not shared by mid-rent countries. It surveys patterns of rent distribution in high-rent countries (HRCs), focusing on energy subsidies and excessive public employment, and argues that these result in declining energy efficiency and labor productivity as well as exclusion of nationals from the private labor market. It then proposes unconditional cash grants for HRC citizens in combination with subsidy and public employment reform as a mitigation strategy to minimize the HRC-specific distortive effects of rent distribution. It is shown that none of the conventional counterarguments to unconditional cash grants applies in the context of HRCs.

Keywords Energy subsidies · Rentier states · Wealth distribution · Gulf monarchies · Public employment · Unconditional basic income

Introduction

The discussion on the "resource curse" has increasingly moved into the terrain of policy prescriptions. One of the most prominent proposals to avoid some of the pathologies that natural resource wealth can engender is the direct

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Steffen Hertog s.hertog@lse.ac.uk distribution of resource rents to the population. This paper seeks to add to the growing literature on cash grants in rentier states by focusing on their potential impact in a particular class of resource-rich states in the developing world: countries with very high per capita resource rents, which are starting to be recognized as a category of their own [1-3].

Such high-rent countries (or HRCs)-a limited number of mostly small-population resource exporters in the developing world-face somewhat different, yet in many ways as daunting development challenges as the mid-rent countries on which much of the resource curse debate has traditionally focused. These challenges, which have never been systematically analyzed, are surveyed in the first half of this paper, focusing in particular on excessive public employment and provision of energy subsidies, both of which are deeply economically distortive. The second half of the paper then makes the case that direct cash grants for HRC citizens are a more economically efficient, fair, and politically palatable distributive tool that should replace excess government employment and energy subsidies. As we will see, the case for such a "citizens' income" is even stronger for HRCs than for mid-rent countries: while retaining most of the redeeming features that cash grants are argued to have in the rentier state universe at large, they would be easier to finance and justify, involve less acute trade-offs, and most importantly help overcome HRCspecific development challenges.

The paper contributes to several literatures: the resource curse and rentier state debates, the debate about subsidy reform in the developing world, and the broader literature on the "basic income" concept that extends beyond politics, development, and economics into political philosophy and whose useful insights (and caveats) are often ignored in the rentier cash grants discussion. By showing how

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Fig. 1 Developing countries with per capita oil and gas rents above 3000 USD (2013) Source: calculated from 2015 World Development Indicators

direct cash grants can substitute for cheap, fossil-based energy, it provides a rough political and economic roadmap for facilitating broader energy transitions in HRCs, particularly the very energy-intensive GCC.

Selection of cases

Any cut-off point to define high-rent status is arbitrary: "HRC" is not a discrete empirical category but rather an ideal type which countries tend to approach as their per capita rents increase. To select cases for the empirical illustrations in this paper, a threshold of 3000 USD per year has been chosen, resulting in the 11 countries, as shown in Fig. 1. Thresholds of 2000 or 4000 USD do not materially change results, and neither does the use of longer term averages. Seven of the 11 cases lie in the Middle East region, two in sub-Saharan Africa, one in Asia, and one in the Caribbean.

To situate HRCs in the wider rentier universe, we occasionally include mid-rent countries (MRCs) with rents between 500 and 3000 USD in this paper. In 2011, 13 non-OECD cases fell into this category: Algeria, Angola, Azerbaijan, Congo-Brazzaville, Ecuador, Iran, Iraq, Kazakhstan, Malaysia, Russia, Syria, Turkmenistan, and Venezuela.

Current outcomes in rentier states

With the potential exception of Equatorial Guinea, all HRC regimes appear to feel a political need to share their resource wealth with the wider population. The way this is done, however—with cheap energy and public sector over-employment playing a leading role¹—is uniquely inefficient.

While these forms of distribution might have been justifiable at times of excess hydrocarbon production capacity and low domestic consumption, and when populations were smaller and state apparatuses just being built, they have now become extremely costly. Cheap energy and excessive public employment are inefficient, regressive, and often exclusive tools of distribution, with deleterious consequences for non-oil diversification, fiscal sustainability, and, in the long run, the potential of local societies to find a growth-oriented compromise between national workers and business. Data used below are from various years, which are a function of availability.

Energy subsidies

Energy subsidies in the developing world have been widely discussed in recent years [4–7]. Cheap energy is typically provided through transport fuel, gas, and electricity that are sold far below international market prices.² Available literature demonstrates convincingly that distribution of rents through cheap energy is regressive, disproportionately benefiting richer households [10]. Different from subsidized public services like health and education, energy consumption also entails negative environmental externalities. Very low consumer and industrial energy prices also make the transition towards more sustainable forms of energy difficult—despite the advantageous geography of many HRCs, notably the GCC countries, which enjoy abundant, continuous sunshine.

The size of implicit subsidies can be tricky to estimate: not all types of energy are easily exportable, and it is not clear whether all of the potentially "liberated" energy production could be exported without pushing international prices downwards [11]. However, even under restrictive assumptions, subsidies are very substantial for most of the countries under study, and their regressive distributional impact and negative externalities obtain independent of their direct fiscal opportunity cost. For the purposes of this paper, we will use the IMF's 2011 energy subsidy estimates, which are comparable across countries. They show that with the exception of Gabon and Equatorial Guinea,³ our cases lie far above the global average of .7% of GDP. Mid-rent countries also have substantial, but for the most part lower energy subsidies (Fig. 2).⁴

¹ There are of course many other forms of rent distribution, including free or subsidized public services, non-salary transfers, preferential contracts for local business etc. Their scale is relatively smaller however, they are often less distortionary, have fewer negative externalities and are harder to compare across countries.

² Average diesel and gasoline prices in HRCs e.g. were less than half of the US benchmark price in 2010; if Gabon is left out, average prices were about a third [8]. Electricity and natural gas prices in some cases are even lower [9].

³ As recently as 2006, Gabon's fuel subsidies alone were estimated at 2% of GDP [12]; the more recent estimates seem to reflect subsequent pricing reforms.

 $^{^4\,}$ The median subsidy estimate is 5.7% of GDP for HRCs and 3.8% for MRCs.



Fig. 2 Pre-tax Energy Subsidies, 2011 (% of GDP). Source: [10]

Several HRCs have recently undertaken partial subsidy reforms [13, 14] and implicit subsidies have also fallen because of lower international energy prices. Nonetheless, prices for the most part remain significantly below international levels.

Typically, the hydrocarbons sector uses only a small fraction of total energy, although it constitutes half or more of GDPs in our cases. This means that the energy subsidy rates in the non-hydrocarbon economy are even higher than for the total economy. They are higher yet relative to a counterfactual in which environmental externalities and foregone tax revenue are considered [10]. Whatever measure for subsidies is used, their share in government revenue is typically more than twice as high as that in (total) GDP, reflecting enormous foregone revenue.

Over the last 3 decades, domestic energy consumption has increased above population growth and, in most cases, above GDP growth (see Figs. 5, 6). In 2010, average per capita energy consumption in our cases was 1.5 times the average of the world's high-income countries.⁵ Anecdotally, much consumption is frivolous, caused by bad insulation, inefficient equipment, and gas-guzzling vehicles that are incentivized by low prices, hence adding little to citizens' welfare [15].

In some cases, most notably Saudi Arabia, growing domestic consumption has started to threaten that countries' hydrocarbons export capacity, further reducing potential government revenue [7, 9].

Labor market outcomes

Over-employment of citizens in the public sector under generous conditions is the second main channel of mass rent circulation that all our HRCs' bar Equatorial Guinea have engaged in, and it is the distribution tool that truly sets them apart from other rentiers. Combined with large-scale labor migration (see Fig. 3), government job guarantees typically result in a large public sector dominated by nationals and a



Fig. 3 Hydrocarbons rent per capita versus migrant population (2010). Source: based on World Bank Development Indicators

■ public employment ■ total private = nationals private S foreigners private



Fig. 4 Labor market structures (2009 unless marked otherwise). Sources: national authorities, World Bank and IMF



Fig. 5 Energy use (kg of oil equivalent) per \$1000 GDP (constant 2005 PPP) Source: World Bank Development Indicators

private sector with a strong or dominant presence of foreign workers (see Fig. 4⁶). Only Trinidad and Tobago forms an exception to the migrant dependence pattern, possibly as a result of its domestic tradition of low-wage plantation labor (the World Bank's figure for the second apparent HRC

⁵ Based on World Development Indicators.

⁶ No labor market data were available for Equatorial Guinea; different from other HRCs, its public sector appears to be rather small as most rents are siphoned off by corrupt political elites [17].



Fig. 6 Rents per capita and shifts in energy intensity 1980–2010. Source: based on World Development Indicators

outlier Equatorial Guinea (GHQ) is probably wrong, as press reports indicate a migrant population of one-third of the total population; "Equatorial Guinea," [16]) (Fig. 3).

For the ten cases on which we have data, there is an average of more than two nationals employed in the public sector per privately employed national. This compares to a typical ratio of one public employee to four or five private employees in both developed and developing countries [18]. Even in MRCs, public employees never constitute more than a third of the total workforce. A citizen's odds of being publicly employed are hence some six to ten times higher in HRCs than elsewhere (Fig. 4).

There is much anecdotal evidence of over-employment and bloated bureaucracies in HRCs, as job creation is typically driven by the need to provide jobs for new labor market entrants rather than by administrative needs. Administrations often perform poorly due to overstaffing and weak incentive systems [19–24].

A survey of available primary and secondary sources shows that HRC public sectors also typically pay much higher salaries, offer more perks, provide higher job security, and extract less performance than private employers do. The pattern is strikingly uniform across cases (Baldwin-Edwards [25]; Forstenlechner and Rutledge [22]; Hertog [23]; Hong-Huat [26]; International Monetary Fund [27, p. 11, 28, p. 15]; Mahabir et al. [29, pp. 8–9].

Different from developed economies, public sectors in HRCs typically act as wage setters [20, 30, 31], shaping nationals' general expectations regarding salaries and work conditions. Private sector wages in all but the highest skilled categories are typically low and work conditions comparatively harsh due to competition with migrant workers. The low-skill foreigners who satisfy most of the private labor demand enjoy limited formal rights [17, 32–35].

As a result, most citizens evince a pronounced preference for public sector employment and many prefer unemployment or staying outside of the workforce to private sector jobs [22, 26, 33, 36, 37]. Conversely, private employers prefer foreigners.

The ironic result of government attempts to create public jobs for everyone is low labor market participation among nationals in most HRCs as well as high citizen unemployment in all but the highest rent countries. Nationals' labor market participation in the four highest rent Gulf monarchies ranges from 36 to 51% [25]; (total) participation ratios reach 61% in Trinidad and Tobago [29], 60% in Gabon and 53% in Libya (World Development Indicators). This compares with a world average of 69%.⁷

There are huge direct and indirect costs to surplus public employment: a large, usually dominant share of potentially productive national manpower is "parked" in jobs, whose economic contribution is questionable. Public sector employment policies give questionable education incentives, leading to an undersupply of national skills relevant in the private market [23]. Public sector over-employment also creates large, unnecessary overhead costs and negative environmental and infrastructure externalities [39]. It also is an inequitable way of sharing the wealth: quite apart from micro-level issues of favoritism and unequal payscales, even in the richest HRCs, a significant—usually young and/or female—segment of the population remains structurally excluded from this form of rent distribution as public employment policies favor older, male job seekers.

Economic development outcomes

The skewed energy and labor market structures described above seem to have led to large macro-economic distortions: descriptive statistics and simple econometrics show that energy efficiency and labor productivity have strongly declined over the last few decades for most HRC cases—a result that does not obtain for mid-rent countries, where at least per capita, subsidies are much lower.⁸

Figure 5 demonstrates that while economies across the world have become more energy efficient over the last three decades, energy intensity of production has strongly increased in HRCs, a result that arguably at least in parts is due to low domestic energy prices.

Relative to the rest of the world, HRC energy intensity has increased by 150% since 1980. Saudi Arabia is now using as much energy as the UK uses, a country with more than twice the Saudi population and 3.6 times its GDP.

As the scatterplot below shows, the link between rents and declining energy efficiency is statistically robust and

⁷ For research linking low female labor market participation in particular to oil income, cf. [38].

⁸ See footnote 4.



1994 1996 1998 2000 2002 2004 2006 2008 2010

Fig. 7 Output per member of the labor force (constant 2005 USD; 1994 = 1). Source: calculated from World Development Indicators



Fig. 8 Shifts in labor productivity and rents per capita (1990 to 2010). Source: calculated from World Development Indicators

not driven by individual HRCs. The relationship does disappear if HRCs are excluded from the sample (Fig. 6).

Figure 7^9 shows a similar trend over time with regard to labor productivity (defined as output per member of the labor force), where incentives in HRCs are similarly skewed due to the availability of low-cost foreign workers and the limited availability of skilled national labor for productive employment.

There is a statistically significant relationship between rents per capita and the shift in labor productivity from 1990 to 2010 (Fig. 8).¹⁰

In line with our expectations, the one non-migrant economy among our HRCs, Trinidad and Tobago, was the only one to witness any substantial improvements in productivity [40] while also maintaining relatively high citizen labor market participation and low unemployment. Again, the correlation disappears when HRCs are taken out of the sample.

Some simple OLS regressions give us further confidence in the robustness of the relationship and provide additional hints as to the causal processes at work (data are insufficient for a full panel specification that could allow more conclusive tests).

Table 1 shows that hydrocarbon rents per capita are a significant and substantial predictor of a decline in productivity from 1990 to 2010. In the simplest model, an additional 1000 USD of rents implies a productivity loss of about 2.6% (column 1).¹¹ For a country with per capita rents of 10,000 USD (which Oman, Saudi Arabia and Equatorial Guinea are close to), the predicted loss amounts to 22%; for a country with rents of 20,000 USD (less than what Qatar and Kuwait had in 2013), it reaches 40%.

Just like growth, labor productivity in standard macroeconomic models is influenced by a number of structural variables, most importantly an economy's capital stock and the quality of its human resources. Including gross fixed capital formation and secondary enrolment ratios in the model does indeed improve its fit, but hardly changes the effect of rents (columns 2 and 3).

Rents only become insignificant when the share of migrants in the population is added to the model, tentative evidence that an important causal mechanism linking rents and productivity losses might indeed be the dominance of low-skilled foreigners on the private labor market (column 4), an argument also made by [41, 42]. As we would expect, the share of migrants itself has a (weakly) significant negative correlation with productivity in model 4, which just about slips into insignificance if secondary enrolment is included as control variable, resulting in the loss of 16 observations (column 5).¹² None of the significant effects of rents in Table 1 obtain if HRCs are left out of the model.

The above is suggestive rather than conclusive and does not provide clear-cut causal identification.

In descriptive terms, it is clear, however, that growth in HRCs has been factor-intensive, relying on rapidly growing inputs of energy and cheap labor while witnessing declining productivity. While the national labor force is parked in the public sector, most of the work in the private sector is done by cheap, low-skill, and low-productivity migrant workers. Available studies about total factor productivity also show it

 $^{^{9}\,}$ Mid-income countries are standardized at 1 in 1993 due to lack of earlier data.

¹⁰ 1990 is the earliest year for which time series data are available for most countries.

¹¹ Due to data limitations, we need to use recent rent per capita figures rather than a two-decade average. For the sub-set of cases where full data are available, the two-decade averages are closely correlated with the 2010 value.

¹² The results in models 1 and 2 survive a number of robustness tests such as the inclusion of an OECD dummy, an Arab world dummy, the omission of OECD cases and of the UAE as influential case; rents in model 3 become insignificant in some of the robustness tests, but the direction and size of the estimated effect remains similar..

Model	1	2	3	4	5		
Hydrocarbon rents per capita ('000 USD in 2010)	026*** (.001)	025*** (.009)	021** (.009)	007 (.013)	005 (.013)		
Gross fixed capital formation (% of GDP, 1990–2010 average)		.038*** (.007)	.035*** (.009)	.037*** (.007)	.035*** (.009)		
Secondary enrolment ratio (%, 1990–2010 average)			0006 (.001)		.000 (.001)		
Migrants (% of population in 2010)				007* (.004)	006 (.004)		
Constant	.259*** (.041)	566*** (.168)	474** (.201)	523*** (.167)	487** (.199)		
adjusted r^2	.063	.2707	.1974	.289	.2154		
Ν	89	87	71	87	71		

Table 1 OLS regressions with change in logged labor productivity 1990-2010 as dependent variable

Standard errors in parentheses

*, **, *** indicates significance at the 90, 95, and 99% level, respectively

as stagnating or falling in HRCs [43–45], including in the non-oil sector [42]. The technology development, diversification, and private employment of nationals that all HRCs aspire to in their development plans are not happening.

Summary

The above empirical sections have demonstrated that HRCs form a distinct class of resource-rich state. HRCs evince a fairly uniform pattern of costly and often inequitable domestic rent distribution in the shape of cheap energy (as some other developing and rentier countries also do) and excessive public sector employment in combination with large-scale, low-skill migration (on a scale unique to HRCs). We have argued that as a result, HRC economies are characterized by strongly declining energy efficiency and declining labor productivity.

The inequity and negative externalities of the status quo should be a concern under all circumstances. Long-term energy consumption and public employment growth, moreover, have typically lain considerably above population growth, creating an increasing cost burden. With the recent reduction in oil prices, most HRCs have started to eat into their overseas reserves, putting the fiscal sustainability of their current development model into question [46]. Insufficient investment into productive skills and assets mean that HRCs are ill-prepared for the time when lower oil prices force state spending to plateau and shrink—which is already happening outside of the very richest HRCs.

The challenge: distribution

Rent distribution in HRCs is a political fact; even the most authoritarian ruler would find it difficult to rescind his material obligations towards his subjects.¹³ Quite apart

from political exigency, the moral case for sharing national wealth with the population is cogent, as citizens are its rightful owners [47, 48].¹⁴ The relevant policy question hence becomes how to reform distribution.

How should distribution be reorganized in an ideal world? Four basic criteria appear to be relevant. Rent recycling should:

- provide the largest and most widespread economic welfare for citizens;
- minimize distortive incentives regarding energy consumption, technology choice, and skills acquisition;
- help to integrate the citizenry into the national economy;
- not undermine the long-term fiscal basis of the state.

The citizens' income concept

This paper proposes a general and unconditional cash grant to all adult HRC citizens, combined with and financed through energy pricing and public employment reform, as the most appropriate means to achieve the above objectives. Although it will not by itself be able to fulfill all aims entirely, it can achieve important improvements on all of them.

General arguments for cash grants in rentier states

There is a growing literature on cash grants as a remedy for the ailments of resource-rich states in general, as well as a wide literature arguing for a tax-financed, unconditional basic income for citizens of advanced economies (for an

¹³ Only the regime in Equatorial-Guinea seems to share remarkably little of its wealth with the wider population.

¹⁴ An unconditional basic income scheme has been supported as compensation for the infringement of common ownership rights more generally [49]; this argument is all the more pertinent in the rentier state context. For a global variant of resource-based cash grants, cf. [50].

concise statement, see [51]). The next section will quickly review the arguments of the former; it will then draw on the general basic income literature when discussing cash grants' specific implications for HRCs as well as potential objections against them.

There are real-world precedents for regular cash grants in a number of rentier economies, including Iran, Bolivia, and Alaska [52, 53]. These experiences have been accompanied by a growing discussion about subsidy reform and cash grants for resource-rich economies in general [47, 54]. The Center for Global Development is undertaking a full research initiative on rent-financed cash grants in resource-rich states.¹⁵

General arguments in favor of rentier cash grants are numerous: compared to regressive energy subsidy systems, they are more equitable [54], less distortive of consumption decisions, and more transparent [55]. Compared to meantested support systems, they are easier to administer, generate smaller overheads, and are less prone to stigmatization and errors of exclusion [47].

Cash grants could keep at least part of the state's resource revenues out of the hands of self-interested politicians, thereby reducing corruption [56, 57]. They could impart a sense of ownership on citizens, increasing their "buy in" into the political system [58], create a constituency for sound natural resource management, and a more level playing field between state and citizens (Gelb and Grasmann [59]; Gillies [60]). Pressures for fiscal transparency and accountability could increase [47, 54].

By providing a secure revenue stream to citizens, cash grants could boost private investment and entrepreneurship (Gelb and Grasmann [59]; Palley [58]; Sandbu [54]). Authors in the cash grants literature have adduced considerable evidence that private agents are adept at investing their money well [54, 57, 61, 62].

Implications for high-rent states

The above arguments generally also apply in the HRC context, although with some nuances: with the exception of Gabon and Equatorial Guinea, corruption is a less acute problem in HRCs than in mid-rent countries¹⁶; conversely, as we have seen above, the need to develop private markets (and employment) is arguably even larger. The main ambition of this article, however, is not to scrutinize the validity of existing rentier cash grant arguments, but to analyze such grants' specific and additional implications in HRCs, which the following sections do.

Energy consumption

The rationale and implications of providing a citizens' income in lieu of energy subsidies are quite straightforward. Energy subsidies favor the rich and have particularly distortive economic effects in HRCs. The need for reforming them by now is widely accepted across the developing world, and substituting less distortive welfare measures, including cash grants, for cheap energy has become a standard policy recommendation [6]. In fact, Iran already introduced unconditional household cash grants as compensation for higher energy prices from 2010 on. Although the program has met some elite-level political resistance, popular resistance has been limited, not least because different from mean-tested welfare schemes, it included all citizens [6, 13, 53].¹⁷

Higher energy prices would help reduce energy consumption both through immediate price effects and by providing longer term incentives to choose more energyefficient technology and lifestyles. Modestly assuming that HRC energy prices could be doubled, and using available international estimates for the long-term price elasticity of energy consumption [5], we can expect consumption to decrease by between 19 and 29%.

Less consumption would both reduce negative environmental externalities and help HRCs to preserve hydrocarbons export capacity (or at least reduce their need to maintain expensive extra production capacity), thereby helping finance the cash grants. Given the highly skewed distribution of energy consumption and the typically larger utility of cash compared to in kind subsidies, the material situation of the vast majority of citizens could be improved on a fiscally neutral basis. The large elasticity estimates also show that technology choices react strongly to price signals; HRCs would hence likely leave the path of declining energy efficiency and move away from subsidydependent production.

Labor markets

Rationale and impact of providing an HRC citizens' income in return for reduced public sector employment are somewhat more complex, but of potentially even larger developmental import. As explained above, public sector overemployment is a costly and inequitable tool of wealth distribution, undermines government effectiveness, and has resulted in the exclusion of HRC citizens from the private

¹⁵ Cf. http://www.cgdev.org/initiative/oil-cash-fighting-resourcecurse-through-cash-transfers.

¹⁶ The average HRC score for the World Bank's "control of corruption" indicator is close to the global average of 0, while the average for MRCs is -.9, almost a standard deviation below the average.

¹⁷ It is somewhat different from the citizens' income proposed here as the Iranian grants are paid to heads of household rather than individuals, giving it a patriarchal bias.

labor market, which is typically dominated by cheap migrant labor and characterized by declining labor productivity.

Creating a citizens' income in return for more selective public sector employment could help mitigate all of these issues. As we will see, arguments in favor of cash grants from the general basic income literature are more relevant than those of the rentier cash grants debate, and apply with particular force in the HRC context.

How would public sector employment be reduced? In practice, it could prove difficult to dismiss significant numbers of the existing stock of public employees, but the grants could be used to justify much more selective and need-based future recruitment. It should be easier to persuade future labor market entrants to exchange the more or less vague hope of future public employment for a concrete, life-long if more modest entitlement.

Critically, in the case of incumbent public sector employees, the citizens' income should be incorporated into their existing pay—which de facto already include a strong rent sharing component—rather than be paid on top of it. This is critical to avoid making (scarcer) government employment even more attractive. Lower earning public employees could receive a partial premium to compensate them for higher energy costs.

The delinking of public employment and rent distribution would make wealth-sharing broader, less exclusive, less discretionary, and much less distortionary in terms of labor market incentives. Incentives provided by a citizens' income would increase citizens' private employment. With unconditional cash grants, citizens would not have to take on idle, often unrewarding government jobs to share in the country's wealth but would be free to pursue their own preferences, including on the private labor market. Although the size of the private employment effect would depend on grant level as well as prevailing wage levels, it is clear that with prospects of an easy public job more remote, at least some citizens would seek other sources of work income.

In this context, the citizens' income would function somewhat analogous to a general wage subsidy.¹⁸ Nationals could achieve acceptable total income levels even if holding less well paid jobs than currently, as their citizens' income would top up their private sector wages without penalty. It would allow them to compete in lower wage labor market segments currently dominated by migrant workers. Incentives to perform would be stronger, as the public sector's low effort benchmark would be less relevant as public employment would be less easily available.

Private jobs would also become relatively more attractive compared to government employment as the wage gap between the two would be narrowed by the amount of the citizens' income. The greater attractiveness of private employment would also incentivize nationals to seek education and skills that are relevant in the private economy and which HRC citizens often lack. Given the new availability of cash grants outside of the government work force, at least some public employees would leave their jobs to receive the citizens' income and potentially seek private economic opportunities on top of it—hence serving both the purpose of reducing the public payroll and of increasing private economic activity by citizens.

Due to its secure nature, a citizens' income would also give job seekers a better bargaining position vis-à-vis employers than conditional benefit schemes, leading to better job market matching and potentially higher wages. A citizens' income would provide "...the administrative security which will enable many people to take the risk of accepting a job or creating their own" [63], raising the level of citizen entrepreneurship that typically is very low in HRCs.

It would also function as a quasi "study grant" allowing nationals to occasionally drop out of the labor market or reduce work engagements to acquire new skills, leading to "significantly more stepping-stone, training-intensive, often part-time jobs," thereby improving human capital accumulation" (Van Parijs and Salinas [64]; Van Parijs [63], p. 65), a particularly grave concern in HRCs. Conversely, secure cash grants could make hiring and firing nationals less socially and politically problematic, thereby bringing citizen employment closer to the flexibility that employers currently enjoy with migrant workers [23].

Economist James Meade has made the argument that a citizens' income in Western economies would allow full employment without exposing low earners to unacceptably low total incomes [65]. It is noteworthy that he argued for such a policy in a context in which implementation would be fiscally vastly more complex—and in which the need for income supplements for private employees is much less urgent, as most of private sector wages in the West are much higher than in HRCs, despite similar levels of overall wealth.¹⁹

Compared to a hypothetical (and unrealistic) scenario of no wealth sharing at all, the citizens' income would reduce

¹⁸ Not strictly analogous, as wage subsidies are only paid when an individual is in paid employment.

¹⁹ The above arguments apply less clearly to Equatorial-Guinea, where civil service employment is limited and hence unlikely to serve as benchmark for citizen's labor market behavior. The positive labor market effects of a citizens' income would accordingly be smaller, and the scheme might lead citizens to drop out of the market altogether. Given Equatorial-Guinea's small formal economy and severe poverty, cash grants would however likely have a stronger positive impact on basic livelihood as well as micro-entrepreneurship, as they have had in other underdeveloped countries.

citizens' private labor supply through a pure income effect.²⁰ It does potentially give recipients the option not to work at all, especially if it is set at a high level compared to available private salaries—a scenario that is more likely (or feasible) among very rich HRCs such as Brunei, Kuwait, Qatar, and the UAE. Even then, work disincentives are less strong, however, compared to conventional means tested support mechanisms, as unconditional grants would avoid the substitution (or "tax") effects of unemployment assistance or insurance and other forms of conditional income support, where benefits are lost as work is found and/or wages increase [39].²¹

A case can be made that choosing not to work, because one is born wealthy can be a perfectly rational and optimal decision resulting from a widened choice set, superior to forcing citizens into meaningless jobs as a condition of rent sharing. If we take citizens' higher labor market participation in productive jobs as a social objective, however, complementary reforms aimed at improving private wages would likely be necessary. These cannot be elaborated on here. They should, however, include improvement in migrants' rights, notably through allowing them mobility between employers, which would improve migrants' bargaining position, thereby increasing prevailing wages [69]. Targeted wage subsidies could also be considered.

Migration reform would be politically and economically easier to undertake if more skilled national labor was available to start with—which citizens' income and public employment reform would contribute to. They would likely result in better albeit fewer jobs for migrants from poor countries—a trade-off that would result from any serious migrant rights reform, on which there seems to be widespread international consensus.

We have already alluded to some of the macro-economic effects that a cash grant scheme combined with public sector employment reform could have: more nationals, with typically higher skills than migrants, would join the private labor market and the market for entrepreneurship; national human resources would be better formed and utilized, likely leading to higher levels of production and productivity. Businesses themselves would have incentives for productivity enhancements to make better use of a higher skilled labor force. Complementary migration reform could reduce incentives to rely on (and exploit) low-skill foreign workers, further motivating businesses to invest in technology and processes that can use better-skilled workers.

A quick note is to differentiate the citizens' income idea from reforms currently underway in the MENA region. At the time of writing, Saudi Arabia was about to roll out a household cash grant system to compensate citizens for future energy price increases.²² Different from the citizens' income, these cash grants will a) be mean-tested and b) not be tied to public employment or other labor market reforms. While mean-testing can in principle make compensation schemes fiscally cheaper, they are administratively complex, especially in countries without an established income tax system. Mean-tested grants also create incentives against work and skill acquisition, as such benefits are lost as other sources of income improve. More generally, mean-tested benefits are less secure for individuals than an unconditional grant providing a guaranteed share in national wealth. Unconditional grants will arguably make other distributional reforms, such as public employment reforms, more widely acceptable among citizens. While conditional compensation grants are a step forward, they remain only a partial fix for the broader distortions created by HRC wealth sharing. Universal grants provide a more comprehensive reform option.

Addressing counterarguments from the basic income literature

There are many potential counterarguments to cash grant schemes, both from the general basic income literature and from the literature on rentier cash grants in particular. The following section will address both in turn, showing that neither set of arguments applies for HRCs.

The most prominent arguments against "basic income" schemes relate to tax rates, labor market incentives, and redistribution (see [51] for an overview). A basic income in the West, as well as lower rent countries under at least some proposals [47, 54], would require significantly higher tax rates on middle to high earners, which could lead to battles over redistribution and reduced political feasibility—one main drawback of basic income schemes compared to other policies [64]. In rentier countries, by contrast, the basic challenge is not how to raise revenue and from whom, but rather how to distribute the existing

²⁰ Some experimental studies in the West have shown that income maintenance schemes have a modest negative effect on the working hours of beneficiaries. Some of this modest effect appears to be due to rising marginal taxes (i.e. a substitution effect), which would not apply in HRCs (cf. [66, 67]). More recent pilot projects in developing countries—in admittedly quite different socio-economic contexts— have shown no effect on or increases in economic activity among recipients of a basic income [47, 61, 68]. In any case, the income effect for more productive workers with higher earnings will be smaller, as the grants will constitute a smaller part of their overall income, further tempering its aggregate impact [47].

²¹ Targeted subsidies for low-wage workers (like the Earned Income Tax Credit in the U.S.) would have weaker incentive effects relative to the citizens' income, reducing work effort and incentives to upgrade one's skills.

²² See vision2030.gov.sa/sites/default/files/attachments/ BB2020_EN.pdf.

rent that accrues from outside of the local economy [70]. HRC fiscal policy by definition is a voluntarist regime that is forced to make decisions on allocation; there is no (immediate) need to build up and justify the extraction of resources from richer strata of society.

Globalization is also seen as a challenge to basic income schemes, as high taxes could drive capital and highly qualified labor out of the country; another issue that does not apply to HRCs [71]. To avoid the politics of taxation, [64] in fact consider the creation of a basic income from some common asset among advanced economies, but concede that this would likely not yield enough revenue. In HRCs, by contrast, it certainly would.

A tax-financed citizens' income in a system with progressive taxation would potentially decrease work incentives for mid- and high earners [39, 51]. A basic income implies a "principled though partial disconnection between labor and income" [63]. This again is not the case for HRCs, at least as far as productive work is concerned: as we have argued above, a well-designed citizens' income would in fact substantially increase private sector work incentives for HRC nationals compared to the status quo.

Closely related, the moral argument that a citizens' income creates a system of free-riders clinging to the coattail of taxpayers does not apply in the HRC scenario [72]. Critics of basic income schemes in the West paint a gloomy picture of an army of idle or near idle citizens living off state-provided payments. In most HRCs, however, the idle armies already exist—including significant parts of the public sector—and are supported in very inequitable ways. There would be fewer of them under a citizens' income.

We have mentioned above that a citizens' income would have an income effect, which could potentially reduce citizens' desired work hours compared to a hypothetical scenario of radical austerity (and, in the status quo scenario, for the small number of nationals already privately employed). It is, however, not clear whether maximizing individuals' hours of work is really a socially desirable goal (Segal [47], p. 484f). This is especially the case in HRCs: as we have seen above, there is currently a shortage of reasonably paid private sector work for HRC nationals. Spreading the available jobs across a broader population with relatively shorter working hours might be a good idea. While in tax-based production states, more work effort tends to beget a growing economy and more work opportunities, this link is less strong in HRCs, where much growth and demand will remain driven by exogenous rents and resulting state spending for a long time. Basic income proponents have made the argument for cash grants as a "soft strategy for job sharing" [63], a particularly relevant point for small HRC labor markets (Fig. 4).

Counterarguments from the rentier cash grant literature

The literature on cash grants in conventional rentier states also (both implicitly and explicitly) points to a number of potential weaknesses of such schemes. Many authors, for example, assume that individuals will use cash more smartly than governments. A citizens' income in HRCs does not necessarily require this assumption, as its objective of incentivizing citizens to join the private labor market would obtain independently of how citizens would spend their grants. As important, HRC cash grants could be financed through subsidy reforms and reduced public sector recruitment, thereby attacking particularly inefficient ways of using public resources. Closely related, the argument that cash grants could "deny a cash strapped government the opportunity of improving the delivery of its services to its citizens" [73] or to build critical infrastructure (Alan Gelb and Majerowicz [61], p. 9) is less relevant for HRCs, whose delivery of public services and infrastructure spending could remain untouched as subsidies and surplus public sector employment are reduced.

Similarly, at least some variants of the rentier cash grant proposal assume that distributing rents through cash grants will require governments to raise taxes to pay for hitherto rent-financed activities [47, 54, 57, 60]. While creating a broad-based tax system is a worthwhile long-term objective for HRCs too, it is not a necessary requirement for the creation of a citizens' income. This drastically increases the latter's political and administrative feasibility.

Many of the supporting arguments for rentier cash grants—such as the developmental utility of building taxation capacity, the creation of a sense of citizen ownership that leads to enforcement of transparency and governance (which are critiqued in [73])—are not required for the citizens' income to make sense in HRCs, which also stands on other merits.

A final critique of rentier cash grants in the literature is that they might not be administratively feasible in weak states [74]. There are general counterarguments against this: many low-capacity administrations have rolled out wide-ranging systems of cash transfers using new technologies such as biometric identification, smartcards, and payments into mobile bank accounts [47, 55, 61]. In any case, with the exception of Equatorial Guinea and to some extent Gabon, HRCs generally have stronger administrative capacity than low- to mid-rent countries.²³

Two more counterarguments not present in the literature are worth considering: first, one potential danger of creating a citizens' income is that it might in the future again be

²³ See footnote 21.

complemented by other, less efficient ways of rent circulation. This is why the simultaneous implementation of cash grants and subsidy and public employment reforms is crucial, and why public awareness of this quid pro quo needs to be built before any reforms. It might be difficult to prevent inefficient patronage from seeping back into the system later on—but the expansion of distortive forms of wealth sharing would be even more likely under a continuation of the status quo scenario. A citizens' income would guarantee that at least some of the government's distributional spending is minimally distortive. A citizens' income would also allow a much clearer and more effective government position to ward off demands for future mass patronage than is possible under the current distributional setup.

Second, HRC rulers might just be so self-interested and politically autonomous as to avoid almost any meaningful distribution to the population, thereby making them disinterested in equity and efficiency of distribution. This seems to be the case in Equatorial Guinea [75]. This problem, however, is not specific to the citizens' income idea: in such cases, no policy prescription about how resources should best be used is of immediate practical relevance, and one might have to wait for a ruler's survival or intended legacy to become contingent on the welfare of his population.

The latter argument is in any case less relevant in case like the GCC monarchies, where wealth sharing is well established. If an HRC regime has any interest in better resource allocation, a citizens' income should in principle be politically feasible as it would create many more winners than losers. [60], moreover, has argued that "the costs of allocating revenues to citizens will be lower if the leader enjoys some autonomy from inter-factional political competition and if the resource rent is sustainably large." The former is the case in all HRCs, the latter arguably in most of them, as they are typically small, non-democratic, centralized, and face low levels of political mobilization in society.

Policy design and feasibility

There is no space here for a detailed discussion of a citizen income's practical policy design—a subject for future work. We will nevertheless venture some preliminary observations on grant level, transition arrangements, and financing, which are critical for labor market impact, political, and fiscal feasibility.

The level of the citizens' income should ideally be fixed quasi-permanently or at least for a considerable period, the latter possibly by tying it to a long-term moving average of resource income (or subsidy savings). Only this way will consistent labor market planning be possible for both government and individuals; for the scheme to have its full incentive effects, HRC citizens need a constant, Table 2Monthly citizens'incomes financed by removal ofpre-tax energy subsidies (USD,2011)

U	I	I)		

Bahrain	1141
Brunei	411
Equatorial Guinea	26
Gabon	8
Kuwait	4642
Libya	290
Oman	394
Qatar	10,072
Saudi Arabia	924
Trinidad and Tobago	77
UAE	5811

Source based on IMF, World Bank, various national reports

predictable income stream.²⁴ A long-term moving average would also allow countries facing reserve depletion to phase out cash grants over time.

At the same time, the scheme might have to be phased in gradually, at least if it is to be financed by subsidy reductions which in turn need to be undertaken in an orderly fashion to allow households and businesses to adjust to new prices. Energy subsidy reforms should be gradual also to allow the wages of migrants to catch up with the resulting cost of living increases—which in turn would be facilitated also by an improvement in migrant workers' labor rights.²⁵

Financing options for a citizens' income could vary from case to case. Detailed country by country estimates are beyond the scope of this article. To give a sense of the possible magnitudes involved, however, Table 2 shows the estimated size of a monthly cash grant for all adults age 20 and older who are not employed in government that could be financed through the complete removal of energy subsidies as estimated by the IMF for 2011.²⁶ Figures are particularly high in countries with large foreign populations.

In some cases, the grant level would be more than enough to bridge the gaps between citizen wages in the public sector, citizen wages in the private sector, and migrant wages in the private sector—even if we allow for the fact that global energy prices and hence implicit subsidies have dropped since 2011. In the UAE, for example, average citizen wages in 2009 were 5400 USD in government and 3600

²⁴ Against this background, a recent proposal of one-off grants for citizens once they reach maturity appears only a second-best solution [76].

²⁵ Governments could also consider providing continued subsidized energy for small households, i.e. up to a certain (low) monthly level of consumption.

²⁶ The assumption is that any energy not used domestically as a result of higher prices could be exported internationally; at least in the short run, this will not be the case for large exporters like Saudi Arabia; the figures for them hence are upper boundary estimates.

USD in the private sector, while (typically less educated) migrant workers earned an average of 700 USD in the private market. Even half of the citizens' incomes estimated in Table 2 would more than bridge the numerical distance between wages in different sectors. Assuming that at least better earning civil servants are excluded from the cash grants, private labor would become significantly more attractive for citizens, while at the same time, they could lower their gross reservation wages to become more competitive with foreign workers.

In Saudi Arabia, average citizen wages in early 2017 were 2800 USD in government and 2000 USD in the private sector, while foreign workers earned an average of 1000 USD in the private market. The estimated cash grant of more than 900 USD in 2011 would roughly bridge both gaps. Cash grants based on current subsidy levels would be lower but still cover a substantial part of the gap.

Even where subsidy reforms could finance only modest cash grants, savings from reduced public sector hiring and gradual attrition of public employment would kick in over a longer period, making the citizens' income more substantial. In the interim period, governments could use targeted tools like wage subsidies to incentivize citizen job seekers to orient themselves towards the private labor market.

In the long run, the citizens' income could potentially be financed entirely out of returns on the sovereign wealth of at least the richer HRCs, and thereby be turned into a permanent revenue stream independent of short-term hydrocarbons price fluctuations. This would address issues of inter-generational equity raised by the depletable nature of resource. Such a sovereign wealth scheme has again be proposed for financing basic income provisions in advanced economies [77], but would be much more substantial and more easily justified in HRCs.

Conclusion and outlook

The ambition of this paper has been twofold: a) to document patterns of resource distribution in high-rent countries (HRCs) and their distinct developmental consequences, which put HRCs into a class of their own within the rentier state universe and (b) to propose cash grants in combination with energy subsidy and public employment reform as a mitigation strategy to minimize the negative impact of rent distribution in HRCs. These policies would improve resource efficiency and productivity, enable entrepreneurship, help to integrate nationals into the private labor market without exposing them to socially unacceptable income levels, facilitate political compromise between social classes, and help put HRCs onto a fiscally sustainable path.

Much further work is required on country-level policy design and quantitative estimates of the impact of different

policy packages. Implications and justifications of a citizens' income will differ somewhat from case to case, but arguments in favor are always strong: this paper's new, HRC-specific arguments are most applicable to HRCs with both large subsidies and public employment (Brunei, Libya and the Gulf monarchies). For the other cases, a different mix of rationales applies, including the existing arguments from the broader cash grants literature, many of the counterarguments to which are less pertinent in the case of HRCs. In the case of Equatorial Guinea and Gabon in particular, cash grants can be justified with weak governance and limited capacity to make good public use of resources, and the fact that relative abundance lessens concerns over having to cut government programs or to immediately create a broad-based taxation system.

Quite apart from future research on HRCs themselves, their conceptualization as a distinct category raises important questions for the broader resource curse literature: due to their large resource income, these cases likely have an outsize importance for many of the statistical studies in the resource curse literature. This article has shown that the characteristics and maladies of mid-rent and high-rent countries might be quite distinct; conflating the two could hence easily lead to invalid conclusions. Investigating the extent to which existing results might be driven by distinct sub-sets of resource-rich countries is hence another important avenue of future research.

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