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RESEARCH ARTICLE

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Exit strategy or springboard for career development? The case of university executives' remuneration

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Abstract

The steady increase of chief executives' compensation in both public and private universities has long been at the centre of public debate and has received a lot of criticism in the UK. As higher education is considered as an industry, a pay for performance relationship is expected. This paper differs by demonstrating that UK Vice Chancellors consider incentives other than remuneration in their career progression. By constructing a comprehensive dataset of UK Vice Chancellors covering academic years 2012/2013 to 2016/2017, we demonstrate that UK university chief executives, especially if young, are willing to accept lower salaries when they interpret their role as a springboard for visible high-profile positions in the public arena.

INTRODUCTION

There is a voluminous and cyclical public debate in the UK regarding the levels of vice chancellors' (henceforth VCs) remuneration at publicly funded universities (Adams & Gamperl, 2018; Boden & Rowlands, 2020; Hunt et al., 2019; Johnes & Virmani, 2020; Mitchell, 2023). According to recent data, the average VC compensation in the UK in 2016-2017 increased by over 3.5% compared with the previous period, reaching over £250,000 (Baker, 2017; Grove, 2018). On top of that, gains in VC salary are greater than those seen by other university employees (Baker, 2017). Thus, the steady increase in executive pay happens even within public higher education (Hunt et al., 2019).

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Because of rises in academic executive pay, some states now have laws limiting the amount of public money that may be spent on this purpose (Gschwandtner & McManus, 2018; Hunt et al., 2019; Johnes & Virmani, 2020), and policymakers have increased scrutiny and oversight (Monks, 2007; Stripling & Fuller, 2011). Given the conflict between boards' desire to hire the most competent leaders available and state budget constraints, student debt problems, and the use of part-time and adjunct professors, executive compensation is an easy target for criticism in this environment.

Annual condemnations of remuneration levels (Pearce, 2016) are countered with arguments in support of high executive salaries stating that 'you get what your pay for', that the very best talent is worth the cost (Hunt et al., 2019), that VCs lead large and complex businesses within which they work hard for objectively set pay (Blanchflower, 2017) or that VCs' increased remuneration is justified with agency rhetoric—claiming that it reflects their appropriate share of university performance improvements. However, there is little to no evidence to either support or to refute these claims. This debate on executive compensation in HE is timely, as UK VC pay has been increasing while tuition fee increases also persist, including the most recent peak to £9250. This then creates the appearance that when tuition costs have increased for university students, they have been used to increase VC salaries (Johnes & Virmani, 2020).

In further exploring the theoretical underpinnings of this debate, we look to identify different motivating factors and underlying principles that explain the level of pay that UK VCs receive. Prior studies have thoroughly outlined classic principal-agent concerns, but given the variance in pay across a sample of UK VCs who have similar responsibilities, despite varying institutional contexts, there seems to be nuances that are missing in describing the motivations of those individuals who accept academic executive roles. This paper ultimately sets out to identify a potential piece of the motivation puzzle, and therefore provide an evidence-based investigation of why some UK VCs might accept lower wages than others, particularly when high wages are evidently available.

Consequently, this paper contributes to this debate and the broader literature on academic executive compensation by taking a more nuanced approach, applying both the stewardship theory and the identity theory, which have previously been under-utilized in this context. We propose that remuneration is not the sole determinant of career choices among university executives in UK higher education, as previous studies on agency theory seems to suggest (Cheng, 2014; Yeung et al., 2019). Chief executives in public universities, especially the youngest, thus may be willing to accept a lower salary if they intend to exploit academic leadership positions as a springboard by gaining visibility to take bigger positions of leadership serving the public, such as political office or within the leadership of key public institutions.

This sheds new light on the debate of executive compensation in HE. We highlight that remuneration level is not excessive for all VCs, but it depends on their individual ambitions. It has important policy implications in terms of how universities and government design incentives for university executives. In general, the study provides new insights into the topic that are also valid for countries other than the UK, which also have systems that provide for university council/board autonomy in executive selection and where market mechanisms drive executive remuneration. They may be interested in considering university executives similar to other ambitious highly qualified people, and they may consider designing policies focussed on differentiating these profiles, regardless of the remuneration scheme—which may not be relevant for them.

The rest of the paper is organized in the following manner. Section 2 reviews the literature and formulates the hypotheses. Section 3 describes the empirical strategy. Section 4 presents the results of the analysis. Section 5 discusses the results. Section 6 concludes.

2 | LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 | Agency theory

The agency theory has been the dominant lens for examining executive compensation (Cheng, 2014) as the basis for the pay-for-performance model (Yeung et al., 2019). According to agency theory, principals who employ agents



to work on their behalf need to incentivize the agents to behave in their interest. Remuneration is the main incentive principals use (Jensen & Meckling, 1976). Whilst agency theory posits a strong correlation between performance and pay, empirical research has demonstrated only a weak relationship between executive compensation and organizational performance in both public and private sectors, including HE (Boden & Rowlands, 2020), or even a reverse causality, in that past performance shapes remuneration (see Edmans et al., 2017).

In the United States, Pfeffer and Ross (1988), through a cross-sectional study of over 500 colleges and universities, found no relationship between quality and executives' remuneration. Ehrenberg et al. (2001) failed to find a strong pay-performance relation by investigating more than 400 private universities and colleges across the Carnegie classifications for five academic years. Bartlett and Sorokina (2005) and Monks (2007) reached similar conclusions for national liberal arts colleges and public universities respectively. Also, in Canada between 1996 and 2006, increases in VC salaries exceeded both productivity and performance gains (Essaji & Horton, 2010). In addition to the studies in North America, also in the UK, the pay for performance hypothesis is not verified. Bachan (2008) focussed on 148 higher education institutions during academic years 1997/1998 and 2005/2006, Tarbert et al. (2008) examined around 100 UK University Vice Chancellors' compensation from 1997 to 2002, and more recently Gschwandtner and McManus (2018) and Bachan and Reilly (2015) also found little to no evidence that university performance accounted for the remuneration level of UK VCs. Among few exceptions, Dolton and Ma (2003) found that UK VCs' remunerations are related to the performance of academic research but not of financial indicators. The weak pay-performance correlation found in different HE contexts may result from the specific performance measures used. Johnes and Virmani (2020) considered three performance measures: efficiency (productivity), media league table rankings and financial stability. They found that only the rankings affected remuneration, and only among pre-1992 universities.

The agency theory has begun to be considered inappropriate in describing the executive compensation of academic leaders (Cheng, 2014; Yeung et al., 2019). Unlike in other sectors, in HE, multiple principal-agent relationships exist as governing boards, state governments, constituent colleges, faculty, students and alumni are all potential principals for VCs (Lane, 2012). Due to the lack of clarity created by multiple university goals, VCs are likely to be evaluated on a wider range of factors as opposed to corporate CEOs. The university chief executive's pay is affected by budgets, capital spending, size, as well as research productivity and outputs, student satisfaction and academic achievement (Johnes & Virmani, 2020). Alternative theories have thus been adopted in this paper in an attempt to help explain executive compensation levels.

2.2 | The stewardship and the identity theories

Due to the quasi non-profit and mission-centred nature of public universities, their executives should tend to regard the top post as a calling and be motivated by values which cannot be quantified in terms of compensation (Cheng, 2014). This is in line with the public service motivation literature (Perry & Hondeghem, 2008), which argues that compared with employees in the private sector, those in the public are more intrinsically motivated and rewarded intangibly and non-monetarily.

Whereas the agency theory favours measurable, extrinsic motivations such as remuneration, stewardship focuses on less-measurable intrinsic factors such as personal growth and achievement (Davis et al., 1997). According to Wasserman (2006), by paying attention to the motivations of executives, the boards would be able to reduce the compensation needed to retain or motivate particular candidates. Specifically, executives inclined to behave as stewards are likely to be willing to accept less compensation than executives at the same level who are motivated by agency considerations, as they better identify with their organization. To identify with a specific organization, in line with the identity theory, the core motivation for people consists of self-enhancement, that is, the accrual of social, psychological or economic benefits (Tavassoli et al., 2014). Usually, the benefits deriving from



self-enhancement are intended as a non-financial reward of employment or in other words, a substitute for pay (Tavassoli et al., 2014).

Economists have recently added identity-based benefits to utility models of wages, but empirical evidence remains lacking. Marketing scholars suggest that people use brand affiliations to affirm, express and enhance their identity both privately (e.g., self-esteem) and publicly (e.g., status). These self-enhancement arguments offer an identity-based explanation for why strong brands can pay their executives less (Focke et al., 2017; Tavassoli et al., 2014). In particular, Tavassoli et al. (2014) argue that executives are willing to accept lower pay for leading firms with strong brands as they are typically the most prominent members of an organization and are more likely to be identified with the firms by external agents. Moreover, the authors also suggest that younger executives should be more likely to value the equity transfer they could obtain through employment in firms with strong brands. Thus, future employers may rely on the brand affiliation as a credible indicator and market signal of human capital, even beyond the actual skills associated with the previous employment experience.

The same line of reasoning may be adopted by academic executives. According to the identity theory, universities are similar to pulpits and offer a level of public visibility, which is higher than the one any private company may ever offer. Academic executives may accept a lower salary because they place more value in the chance to take the role of chief executive as a starting point to elevate their careers, more than an immediate financial return. This may be especially true for younger executives that have longer careers ahead of them, as they are also likely to have greater opportunities to leverage this equity for social or economic gains, or to attain future high-ranking positions in public service.

There is evidence in the literature on the mobility of academic VCs in both the UK and the United States. According to Dolton and Ma (2003), to improve their pay, UK VCs should move to another university. Indeed, there has been an increasing trend for VC appointments to be individuals who were former VCs at other universities (Barbato, 2023). By analysing the difference between public and private universities, Monks (2007) argues that private university executives are more likely to have held a prior executive position, while public university executives are more likely to either be promoted from within or go outside education altogether to obtain their leaders. Therefore, we formulate the following hypotheses:

Hypothesis 1. Academic executives are more willing to accept a lower salary if academic leadership is intended as a springboard for a prominent leadership position in the public sphere.

Hypothesis 2. Young academic executives are more willing to accept a lower salary if academic leadership is intended as a springboard for a prominent leadership position in the public sphere.

3 | RESEARCH DESIGN

3.1 | Data and methodology

The analyses are performed at the individual level, as UK public research university VCs are the unit of the analysis. We include all the VCs in charge of 126 UK universities between 2012 and 2017, that have now completed their term, resulting in a sample of 216 individuals and 756 university-year observations. The list of UK universities is retrieved by the Higher Education Statistical Agency (HESA). For each university, the names of VCs and their remuneration were collected, and individual CVs were used to find personal information on their future careers.

The year 2012 is selected as starting point of the analysis due to some reforms concerning the university system in UK. The package of reforms was envisaged (1) to increase the cap on tuition fees to £9000; (2) to cut most ongoing direct public funding for tuition; (3) to raise the loan repayment threshold to £21,000, to charge a real rate



of interest on loans for those making repayment, to extend the maximum duration of loans from 25 to 30 years, and to make fee loans available to part-time students; and (4) to increase the cap on student numbers in England by 30,000 by two years, with the aim of favouring dynamism and student choice in the system (Bolton, 2012). The year 2017 is instead selected as the last year of our analysis because to test our hypotheses we observe the VCs after the end of their mandate. We assume that in the five years following their mandate, they have had the chance to undertake an ambitious future career if they so choose.

To test our hypotheses empirically, we perform two different analyses: first, we analyse the determinants of VCs' remuneration, and second, we detect who goes on to hold a prominent public position (such as political office or the leadership of a public ministry, influential NGO or supranational organization) after the end of their term. Referring to the first analysis, we perform different panel model regressions where the dependent variable is the executive remuneration, consisting of base compensation, bonus compensation, deferred compensation, unvested compensation, and retirement compensation, less any reported severance pays. We performed a fixed-effect estimation to clean out the effect of all fixed unobservable variables, a random-effect estimation to consider the role of fixed variables (e.g., gender),² and a generalized method of moments (GMM model) (Arellano & Bond, 1991), to take into account the potential dynamic structure of remuneration, as well as the potential endogeneity of certain variables.³

Concerning the second analysis, we perform a logit regression where the dependent variable is a dummy measuring the visible public position as a politician or a head of a public office, taken on by the VC in the five years following the ending of his/her mandate (up to 31 December 2021 for those terminating their mandate in 2017) (216 observations).

3.2 | Variables

Driven by previous studies, we collect an array of different variables at individual, university and contextual levels. The first category includes gender (a dummy variable equal to 1 for female VCs), age (the number of years since a VC's birth), experience abroad (during the doctoral studies or the academic career, assessed as a dummy) and academic discipline the VC has been mostly engaged in (classified according to ERC main domains: Life Sciences (LS), Physical sciences and engineering (PE, and Social Sciences and Humanities (SH)). These variables have been adopted in prior studies (Dolton & Ma, 2003; Ehrenberg et al., 2001; Monks, 2007). These studies suggest that the education and experience, which individuals acquire over their working life, have a direct effect on their productivity and effectiveness in a senior management role, thus determining their higher compensation (Dolton & Ma, 2003). Empirical evidence supports similar arguments. Bartlett and Sorokina (2005) demonstrated that personal characteristics had a larger effect than performance measures on executive compensation. Also, Ehrenberg et al. (2001), Barbato (2023)) and Monks (2007) insisted on the relevance of individual attributes, specifically seniority, prior experience and their prior field of study. The age variable can also represent the tenure of VCs, which is often associated with the bureaucratic model, according to which executives are bureaucrats and their compensation depends on their level in the hierarchy and general responsibilities (Cheng, 2014; Huang & Chen, 2013).

The main variables at the university level are the total annual revenues and the ratio between grants and total income as measures of the university size and performance, respectively (Ehrenberg et al., 2001; Huang & Chen, 2013). Huang and Chen (2013) measure the structural complexity of the VC's job this way, as jobs tend to be more complex in universities with a large scale of operations (i.e., with greater revenues). Other university variables consist of the student/staff ratio, the share of foreign students enrolled and the share of foreign academic staff. Moreover, we include the relative ARWU ranking position, as well as a dummy controlling for universities belonging to the Russell Group association, in order to assess the prestige of the university led by the VC (Barbato, 2023; Breakwell & Tytherleigh, 2008). It is a categorical variable ranging between 1 and 29, where 1 represents the highest position (the 3rd ranked) and 29 the lowest position (beyond the 1000th ranked) within the Shanghai ranking.



These are all measures which have been adopted to investigate the pay for performance relations under the lens of agency theory (Cheng, 2014; Huang & Chen, 2013; Hunt et al., 2019; Johnes & Virmani, 2020).

Finally, the ratio of high-paid academic staff is included (Bachan & Reilly, 2015; Johnes & Virmani, 2020). The assumption at the basis is that internal promotion provides the necessary incentives for high-ranking executives (Bachan & Reilly, 2015). Workers are ranked according to their relative performance and winners secure the 'prize' in terms of higher pay and the opportunity to participate in subsequent promotions, where the ultimate prize is the promotion to the rank of executive (Bachan, 2008). The effort exercised by the workers depends on the differential in pay between a high ranked position and a lower rank, the number of competitors in the lottery and the likelihood of winning (Bachan, 2008). The pay for VCs is influenced by the pay received by those in a lower ranked position (e.g., Pro Vice Chancellor) or simply by the presence of highly paid academic staff. Therefore, due to going up in the hierarchy, this mechanism generates a trend where executives' pay is proportionately much higher than those that are directly under them (Bachan, 2008).

The third category includes context controls for the population and the GDP per capita of the region where the university headed by the VC is located.

Information for each VC has been derived by the individual curriculum vitae. University data were found on the HESA database. Data concerning the context were derived from Eurostat. A detailed description of variables and data sources is shown in Table 1.

4 | RESULTS

Table 2 reports descriptive evidence on the population of UK VCs, as well as on the university they head and the context where the universities are located. On average, a UK VC in our sample earns 276 thousand pounds per year and is 56 years old. One out of five takes a visible public position (such as political office or ministry leadership) after their term is finished. About 38% of VCs has an experience abroad during their academic career and 20% are female. 40% of them studied in the arts and humanities field, while the rest had either a business and technological (24%), natural science (20%), or medical (16%) background.

UK executives head complex and big universities with revenues equal on average to £238 million, out of which around 18% comes from grants. The share of foreign academic staff and of foreign students are almost aligned, at 19% and 18% respectively. VCs in our sample head heterogeneous universities in terms of prestige, as they are ranked between 1st and 26th in the dataset, which is then between 1st and 600th worldwide. Concerning the context, the universities are located on average in highly populated regions, with around 5 million inhabitants in the broader area, and the areas also tend to be comparatively wealthy, with average GDP per capita higher than £32 thousand.

Table 3 shows the results of the Fixed Effect Panel Model (1), Random Effect Panel Model and GMM Panel Model (3) estimates on the determinant of VC remuneration. The determinants of VCs' remuneration are stable across models. On average, higher salaries are earned by VCs who spent a period abroad during either their studies or the following academic career, who head universities characterized by high income and high prestige in terms of ranking. The positive association between VCs' remuneration and the highly paid employees is detected only for Model 2. Among controls, GDP per capita is positively associated to the VCs' remuneration, while VC's belonging to the Life Science area tend to be remunerated less. The positive relationship between the experience abroad and remuneration is in line with previous studies (Ehrenberg et al., 2001; Monks, 2007).

The positive relationship between remuneration, the total income and the ranking position has been detected by other scholars focussing on the pay-performance relation that is central to the agency theory (Cheng, 2014; Yeung et al., 2019). It asserts that capable VCs are able to attract sources of revenues, including tuition fees, and increase the university prestige through a high ranking. At the same time, the positive relationship between remuneration and the total income can be also attributable to the structural theory, according to which executives



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Variable	Description	Source
Panel A: Individual characteristics		
Prestigious career	Dummy variable equal to 1 if the VC after his/her term holds a prestigious public position (i.e., politicians or head of public orgs/associations)	Curriculum vitae
Remuneration (£000)	Annual salary paid to a VC, consisting of base compensation, bonus compensation, deferred compensation, unvested compensation and retirement compensation, less any reported severance pay. Natural logarithms in regression analyses	University website
Gender	Dummy variable equal to 1 if VC is female	Curriculum vitae
Age	Number of years since VC's birth	Curriculum vitae
Abroad	Dummy variable equal to 1 if VC has experiences abroad (during doctoral studies and/or academic career)	Curriculum vita
Disciplinary dummies	Set of dummy variables controlling for the main disciplinary field of the rector. We adopt a classification based on the three domains used by the ERC EU framework. Social Science and Humanities (5H) is used as reference case, while two dummies are included in our models for Life Sciences (LS) and Physical sciences and engineering (PE)	Curriculum vitae
Panel B: University characteristics		
Total income	Total income of the university headed by the VC. It identifies the gross income position, that is, it includes donations (with or without restrictions) and endowment capital. Natural logarithms in regression analyses	HESA
Funding body grants/Total income	Ratio between funding body grants and total income of the university headed by the VC. Funding body grants includes those from the Office for Students, the Higher Education Funding Council for Wales, the Scottish Further and Higher Education Funding Council, the Department for Education	НЕЅА
Student/staff ratio	The ratio between the number of academic staff and the number of enrolled students. It identifies the teaching resources of a higher education institution	HESA
Highly paid staff ratio	The ratio between high-paid academic staff to the total academic staff hired in the university headed by the VC. The contract salaries are grouped into six salary ranges, the upper and lower of each range aligned with salary spine points used in the JNCHES Pay Spine	НЕЅА
Foreign student	Share of foreign students enrolled out of the total number students enrolled in the university headed by the VC	HESA
Foreign staff	Share of foreign academic staff out of total number of academic staff in the university headed by the VC	HESA
Relative ARWU position	Categorical variable ranging between 1 and 29, where 1 represents the highest position and 29 the lowest position within the Shanghai ranking held by the university headed by the VC	Shanghai ranking website



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TABLE 1 (Continued)

Variable	Description	Source
Russel Group dummy	Dummy variable equal to 1 for all higher education institutions belonging to the Russell Group association	Russell Group website
Panel C: Context characteristics		
Population	Number of inhabitants in the region where university headed by the VC is located. Natural logarithms in regression analyses	Eurostat
GDP per capita	Gross Domestic Product per capita of the region where university headed by the VC is located. Natural logarithms in regression analyses	Eurostat

TABLE 2 Descriptive statistics.					
Variable	Obs	Mean	Std. dev.	Min	Max
Panel A: Dependent variables					
Prestigious career (dummy)	216	0.20	0.41	0	1
Remuneration (£000)	756	276.03	67.86	110.07	626.00
Panel B: Individual determinants					
Gender (dummy)	216	0.20	0.41	0	1
Age at the beginning of the mandate (years)	216	55.92	5.26	47	65
Abroad (dummy)	216	0.38	0.49	0	1
Disciplinary field: LS (dummy)	216	0.32	0.46	0	1
Disciplinary field: PE (dummy)	216	0.24	0.43	0	1
Disciplinary field: SH (dummy)	216	0.44	0.49	0	1
Panel B: University determinants					
Total income (£million)	756	238.37	257.44	7.44	2236.92
Funding body grants/Total income (%)	756	17.91	12.07	1.71	73.36
Student/staff ratio	756	14.41	6.66	3.33	29.36
Highly paid staff ratio (%)	756	16.68	11.10	2.12	100
Foreign student (%)	756	18.56	13.03	3.12	79.12
Foreign staff (%)	756	16.89	9.12	2.50	46.65
ARWU position	756	14.78	9.21	1	126
Russell Group dummy	756	0.17	0.38	0	1
Panel C: Context determinants					
Region population (million)	216	4.63	1.87	1.82	5.56
GDP per capita (\$000)	756	32.30	28.97	19.10	188.90

Note: The table reports descriptive statistics for all variables used in our model. Notice that we have 216 observations for time-fixed variables (employed in all models but fixed-effect panel models), and 756 observations for time-varying models.

in complex organizations are paid more (Cichello, 2005; Huang & Chen, 2013; Schaefer, 1998). Finally, the ratio of highly paid academic staff suggests the validity of the promotional hierarchy, according to which the executive remuneration can incentivize workers at every level of the company. Consequently, remuneration is based on grade rather than marginal product (Johnes & Virmani, 2020).

Table 4 provides insights concerning the exit strategy of the UK university executives. Model 1 shows the correlation between three main individual level determinants: remuneration, gender and age. Model 2 includes the interaction between remuneration level and age. Model 3 includes all individual level variables. Model 4 includes all the variables and is our reference model. Both age and remuneration are statistically, and negatively, correlated to a visible public leadership position. Thus, those taking a prominent public position after their term are likely to be younger and to earn a lower salary as a VC. Accordingly, the younger VCs settle for a lower level of remuneration in order to exploit their role as a springboard for a brightening future career. The interaction between age and remuneration, which we interpret as a measure of seniority is statistically and positively correlated. Thus, seniority increases the likelihood of a visible public office without overturning the signs of both age and remuneration. A prominent public leadership position may therefore be both a deliberate choice for young VCs who decide to sacrifice high remuneration as a signal for their ambition, as well as a natural outcome for senior executives who earn more salary and are mature enough to fulfil a highly-visible role in the public sphere. Our hypotheses are thus supported by the results.



TABLE 3 Remuneration determinants.

	(1)	(2)	(3)
	Remuneration	Remuneration	Remuneration
	FE	RE	GMM
Gender	-	0.001	0.003
		(0.033)	(0.041)
Age	-	-0.000 (0.000)	-0.000 (0.000)
Disciplinary field: LS	-	-0.067**	-0.073**
		(0.031)	(0.031)
Disciplinary field: PE	-	0.036	0.030
		(0.036)	(0.038)
Abroad	0.119*	0.109**	0.129**
	(0.064)	(0.048)	(0.053)
Total income	0.073*	0.154***	0.130***
	(0.043)	(0.021)	(0.038)
Funding body grants/Total income (%)	0.027	-0.055	-0.105
	(0.136)	(0.096)	(0.261)
Student/staff ratio	-0.001	-0.000	-0.001
	(0.003)	(0.002)	(0.006)
Highly paid staff ratio	0.114	0.145*	0.420**
	(0.125)	(0.082)	(0.204)
Foreign students (%)	0.095	0.045	-0.282
	(0.153)	(0.107)	(0.282)
Foreign staff (%)	0.000	0.013	-0.023
	(0.263)	(0.161)	(0.420)
Relative ARWU position	0.002**	0.002**	0.001
	(0.001)	(0.001)	(0.001)
Russell Group dummy	-	-0.046	0.005
		(0.043)	(0.067)
Population (million)	0.641	0.799***	0.546***
	(0.532)	(0.109)	(0.177)
GDP per capita (£000)	0.656***	0.771***	0.565***
	(0.122)	(0.102)	(0.177)
Constant	11.394***	13.971***	12.744***
	(0.492)	(0.626)	(0.948)
Observations	756	756	756
Number of VCs	216	216	216
Adjusted R-Squared	0.318	0.345	-
Hansen test of overidentification restriction (p-value)	-	-	130.16 (0.46)

Note: Fixed Effect Panel Model (1), Random Effect Panel Model, and GMM Panel Model (3) estimates on the determinant of VCs' remuneration. Time-invariant variables are dropped from model 1. All other variables are observed per year and are lagged by one year in the regression analysis. ***, ***, and * indicate significance at levels less than 1%, 5%, and 10%, respectively.



TABLE 4 Prestigious career after university VC's term.					
	(1)	(2)	(3)	(4)	
	Prestigious career	Prestigious career	Prestigious career	Prestigious career	
Remuneration	-0.046	-0.081	0.597	-0.998**	
	(0.039)	(0.081)	(0.576)	(0.423)	
Gender	0.585*	0.588*	0.541**	0.473**	
	(0.302)	(0.303)	(0.241)	(0.239)	
Age	-0.049	-0.132	-0.886	-1.497**	
	(0.037)	(0.840)	(0.864)	(0.725)	
$Age \times Remuneration$		0.065	0.077	0.035**	
		(0.067)	(0.069)	(0.014)	
Disciplinary field: LS			0.019	-0.177	
			(0.200)	(0.235)	
Disciplinary field: PE			0.235	0.184	
			(0.181)	(0.203)	
Abroad			0.235	0.184	
			(0.181)	(0.203)	
Total income				-0.465**	
				(0.201)	
Funding body grant/				0.352	
Total income				(0.895)	
Student/staff ratio				0.011	
				(0.025)	
Highly paid staff ratio				0.377	
(%)				(1.558)	
Foreign students (%)				1.815	
				(1.338)	
Foreign staff (%)				3.632**	
				(1.689)	
Relative ARWU position				-0.001	
				(0.005)	
Russell Group ratio				-0.442	
DI-+: (:II:)				(0.379) 2.444	
Population (million)					
GDP per capita (£000)				(1.560) -2.216	
GDF per capita (£000)					
Constant	2.700	-7.994	-17.574	(1.447) 7.419	
Constant	(4.723)	-7.994 (49.690)	(50.876)	(72.808)	
Observations	(4.723)	(49.690)	(50.876)	216	
Pseudo R-squared	0.025	0.027	0.042	0.068	
i seudo ix-squared	0.023	0.027	0.042	0.000	

Note: Logit Models on the probability to take on a prestigious career following the mandate as university VC. All determinants are measured at the last year of VC's mandate. Model 1 includes exclusively Remuneration, gender, and age. Model 2 also includes the interaction between age and remuneration. Model 3 includes all individual controls. Model 4 includes the full specification. ***, **, and * indicate significance at levels less than 1%, 5%, and 10%, respectively.



5 | DISCUSSION

There is a general trend where chancellorship is no longer necessarily a final appointment for prominent academics to finish-up their impressive careers before they retire. This is suggested by Dolton and Ma (2003) for the UK context. We have therefore supposed that the level of pay of UK university executives is closely related to the individual aspirations and post-VC planning of those taking on these specific roles—reasoning that a person looking to leverage their executive academic post for a visible position in the public arena after their service will not command as much compensation as an individual that intends to make the leadership of a university the final line on the CV prior to retirement. We have focused on remuneration because within the UK HE system, there is a heated debate around executive compensation and several scholars have already addressed the issue of the determinants of VCs' remuneration (Mitchell, 2023).

Nonetheless, we contribute to the broader literature regarding academic executive compensation by suggesting that the alternative stewardship and identity theories can be adopted to generate additional insights into the remunerations of academic executives, as they are considered active and participatory actors with their own aspirations and goals which are in accordance with those of their organizations. Instead of being incentivized by the remuneration as expected by the agency theory, by fulfilling university objectives VCs are able to signal their quality to the broader society and achieve access to prominent positions in public service.

The implications of our study are interesting, because while the traditional theoretical frameworks focus on contexts such as the United States, the UK, Canada and Australia, the rise in academic executive compensation is involving other countries as well, such as Norway (Boden & Rowlands, 2020). Therefore, the importance of the study can be extended beyond the UK to other national contexts where university councils demonstrate discretion in selecting executive officers. We believe that the lack of relevance of remuneration for academic executives that are willing to pursue a visible public position after their time in university leadership may be also valid in countries which are traditionally intended to be strongly bureaucratic. In countries such as Italy, for example, academic leadership can be intended by executives as a preparatory position, suitable for specific political career ambitions. There is plenty of examples where former university executive became Ministry of Education. While our results cannot fully explain or account for the totality of an individual's motivations in making career choices, the empirical findings of this study do demonstrate a non-coincidental correlation between lower remuneration in an academic executive position and taking visible public position later on, which suggests that this may be partially involved in the individual's decision-making process.

However, our research is limited in its explanatory power since we have curtailed our sample to the UK. Additionally, UK higher education institutions vary widely in their individual contexts in terms of size, mission-focus, surrounding community, age, etc., and this may also impact salaries and career motivations for VCs which are not accounted for in our study (Barbato, 2023; Barbato et al., 2023). Future research should investigate if our findings hold across different educational systems in different nations, as well as different institutional contexts. In doing so, caution is needed as some of the traditional theories which we have validated with the first part of our analysis are driven by context and may be not suitable for bureaucratic and highly regulated HE systems.

Furthermore, future research should follow our study in that more focus is needed on individual aspects and motivations of VCs themselves. According to prior works, individual factors and motivations could include prior administrative experience (Barbato, 2023; Breakwell & Tytherleigh, 2008), a focus on internationalization and/or individual research excellence (Pearce, 2016). The fact that the universities are confronted more and more with questions about what value these organizations add to society and how well they respond to the public's expectations may also be a venue for further research. Societal stakeholders expect universities to be efficient as well as to contribute to solving societal problems (Salemans & Budding, 2021). This raises the question of how, and should, universities define and link their future goals towards VC renumeration.



Starting from the most traditional theoretical frameworks adopted by the literature so far, we suggest adopting the stewardship theory and the identity theory to demonstrate that it is possible that chief executives in public universities, especially the youngest, are willing to accept a lower salary if they intend to exploit academic leadership positions as a springboard for a future prominent public position—tentatively suggesting that career trajectory may play a role in an academic executive's larger motivation picture when considering compensation. This sheds new light on the debate of executive compensation in HE and may provide new insights into studying the topic in other countries, which are traditionally intended as strongly bureaucratic in nature.

This study then contributes to the broader literature by providing a more nuanced approach to understanding academic executive compensation, showing that a portion of executives may be motivated by factors other than the amount of compensation itself when accepting a position. These findings then better inform policymakers and decision makers in the university context, particularly in country contexts like the UK where university councils hold sway in selecting executives, helping them to better align compensation policies with the type of executive which they seek to employ. In fact, our results show that remuneration cannot be seen in all cases as an effective incentive to stimulate individual and university performance enhancement. On one hand, our results show that remuneration practices do not incorporate several contingencies that, according to theory, should be taken into account On the other hand, when connecting VC remuneration and career choices, we surmise that our results on the interaction between VC age and remuneration illuminate the opportunity to adapt remuneration practices depending on individual and institutional contingencies. In these respects, our paper suggests that central and prestigious universities provide their VCs with a visibility that turns into prominent public office opportunities for their leaders, while peripherical and developing universities need to account for a liability of distinctness, ultimately requiring them to adjust remunerations.

AUTHOR CONTRIBUTIONS

Alice Civera: Writing – original draft; writing – review and editing; data curation. Erik E. Lehmann: Supervision; conceptualization. Michele Meoli: Methodology; data curation; formal analysis. Jonah M. Otto: Data curation; writing – review and editing. Stefano Paleari: Supervision; conceptualization.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest in the submission of this manuscript.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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ENDNOTES

¹The cap on student numbers in England was removed in academic year 2015/16.

²We ran a Hausman test, providing support for a fixed effect model, given that the null hypothesis of dummy variables equals to zero is rejected at less than 1%.

³The variable treated as potentially endogenous in our model are the following: Total Income, Funding body grants/Total income, Highly paid staff ratio, Foreign student, Foreign staff, and Relative ARWU position.



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