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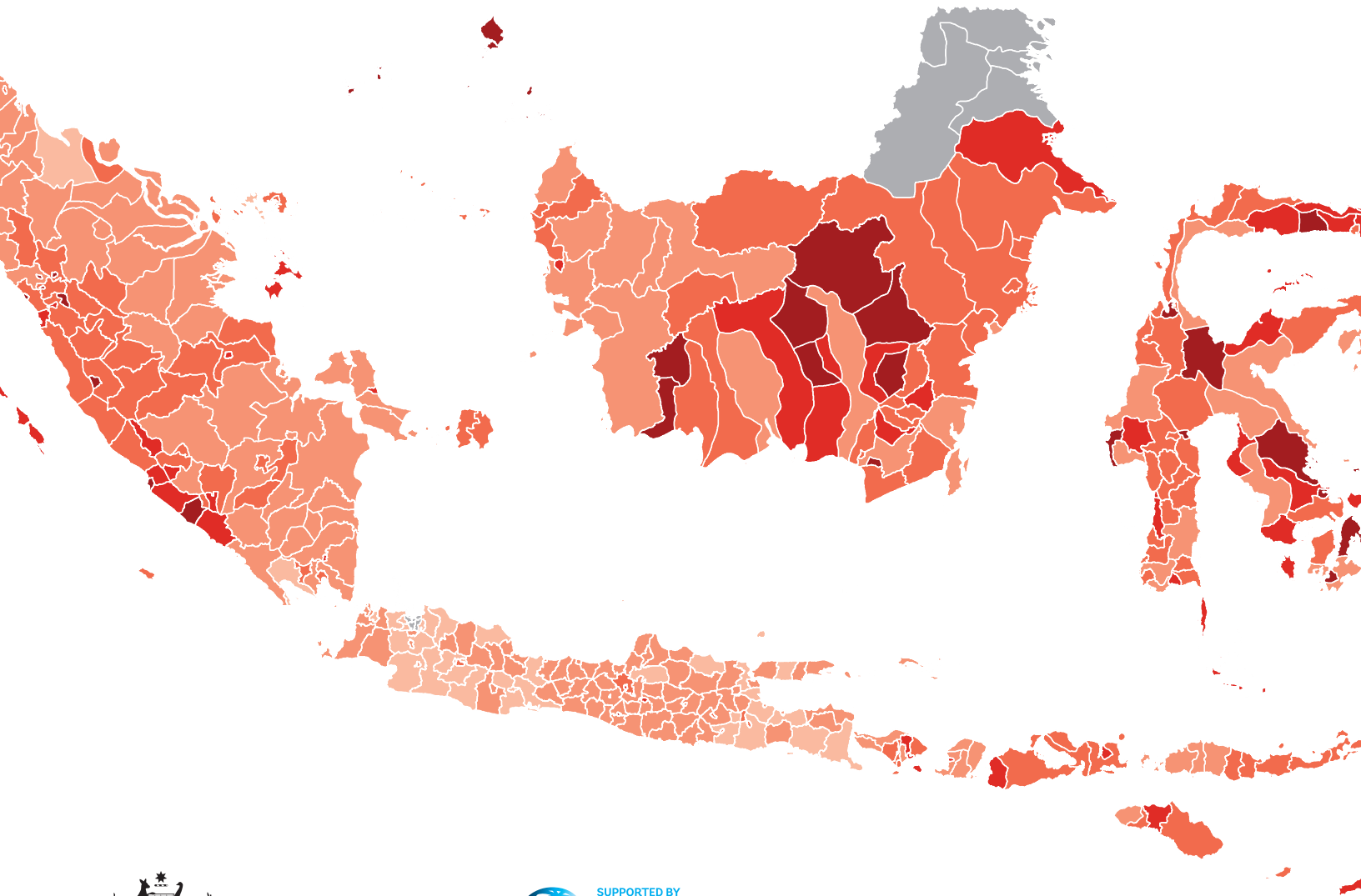
MAPPING INDONESIA'S CIVIL SERVICE



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Executive Summary

Indonesia's civil service has expanded by 25 percent in the last 12 years, which presents opportunities for the government of Indonesia (GoI) to work toward the goal of reducing poverty and enhancing social welfare. Yet civil servants must be skilled, knowledgeable, and effective at their jobs to maximize their contribution to society and the economy.

This report examines an original data set constructed from GoI data on all the country's active civil servants to examine personal characteristics including age, gender, education level (which proxies for skill), and promotions. It addresses two important questions:

1. Are highly skilled and knowledgeable workers currently being attracted, recruited, and promoted? The study finds that Indonesia's civil service recognizes merit in practice, elevating highly skilled civil servants to leadership positions. Civil servants with a postgraduate education are now twice as likely to be promoted as before 1999. Yet there are discrepancies in the educational background of frontline service providers across Indonesia. Better-qualified teachers and medical personnel are concentrated in wealthier regions. For example, over 67 percent of teachers in Java have a four-year university degree, compared with only 54 percent in Papua and West Papua.
2. Are civil servants from historically underrepresented groups, including women, being given equal opportunities for advancement and promotion? The data show large variation in gender balance between government departments at both the national and subnational levels. Men dominate the management-level positions at both levels of government, particularly at the top levels. Women are about 1 percentage point less likely than men to be promoted in a given year, and the gender penalty for women increased by 1 percentage point after 1999, particularly in the early stages of their careers.

The study recommends government action in three policy areas:

1. Increase promotion opportunities for women and increase their overall representation in senior positions by 1) creating a leadership program that facilitates networking and

mentoring for female civil servants; 2) encouraging more female graduates to apply to the civil service; and 3) initiating a high-level dialogue to implement solutions to the gender-based promotion penalty. A leadership program could help identify young talent that could enter the echelon scale and ensure there are sufficient numbers of women in talent pools for promotions.

2. Distribute skilled civil servants more evenly throughout the country by improving the incentives for highly skilled service providers to rotate into poor and remote regions.
3. Plan for the upcoming wave of retirements within the civil service by recruiting more women from top universities and hiring medical and teaching staff only from licensed and accredited institutions.

Contents

Acronyms

BKN	*Badan Kepegawaian Negara* (National Civil Service Agency)
DKI Jakarta	Daerah Khusus Ibukota Jakarta (Jakarta Special Capital Region)
GoI	Government of Indonesia

Introduction

Indonesia's civil service has expanded by 25 percent in recent years from around 3.6 million in 2006 to more than 4.5 million today. The civil service employs approximately 1.7 percent of the country's population in 29 national, regional, and local government agencies and currently costs the government of Indonesia (GoI) around 25 percent of annual government revenue.

Although this recent growth creates new opportunities for the GoI to work toward the goal of reducing poverty and enhancing social welfare, it is necessary to ensure that civil servants are skilled, knowledgeable, and effective at their jobs to maximize their contributions to society and the economy. Academic and policy researchers find that an effective civil service is essential for the delivery of high-quality public goods and services (Doner, Ritchie, and Slater 2005), and for facilitating economic growth and improving human welfare (Besley and Persson 2010; Evans 1995; Evans and Rauch 1999; Rothstein and Teorell 2008). Yet, many governments fall short of this ideal (Rauch and Evans 2000), and there is evidence that the absence of a competent and effective civil service stifles economic development (Evans 1989; Roth 1968).

Studies show that a meritocratic system of recruitment and promotion that hires and promotes the most skilled, knowledgeable, and effective candidates can help improve civil service productivity in two ways. First, such a system should enable the efficient delivery of higher-quality public services. Second, because it widens the pool of candidates, it should also increase diversity, which can lead to improvements in problem solving (Hong and Page 2001; Lazear 1999) and innovation (Herring 2009).

Men have traditionally dominated Indonesia's civil service – particularly its leadership positions. Before the 1998 political transition, the civil service was heavily centralized, and civil service appointments were often made to support regime stability (Evers 1987; McLeod 2008). Since then, important progress has been made in developing a meritocratic system of recruitment and promotion.

This report addresses two important questions. First, are highly skilled and knowledgeable workers currently being attracted to, recruited, and promoted in Indonesia's civil service? Second, are female civil servants being given equal opportunities for advancement and promotion?

Using an original data set constructed from the National Civil Service Agency (*Badan Kepegawaian Negara*, BKN) database that contains data on all Indonesian civil servants, this report examines the composition of the country's civil service and investigates the determinants of promotion. Based on these findings, it proposes a set of policy recommendations for improving the effectiveness of civil service delivery.

The report starts by describing the history of Indonesia's civil service and then discusses the BKN database and the methods used to analyze the data. It then presents descriptive statistics of Indonesia's civil service and identifies key patterns and trends. Next, it formally investigates the determinants of civil service promotions, paying close attention to the role of gender and education. Finally, it discusses the results of the analysis and offers several policy recommendations.

Education, Gender, and Indonesia's Civil Service

The Indonesian civil service has its roots in the system of courtiers that dates back to the Javanese aristocracy (*priyayi*) and the Dutch colonial administration. The Dutch system of indirect rule merged the colonial state with the existing social strata of traditional leaders and employed Javanese aristocrats to govern the local population (Vickers 2005). At the time of independence, most top-level civil servants were Dutch citizens, and Indonesia's civil service numbered around 50,000 (Tjiptoherijanto 2007). The newly formed Government of Indonesia (GoI) created a unitary state and supplanted the local aristocracy with a new class of national activists who had fought for independence. This led to the first major expansion of the civil service; it was supported by political parties, which were granted the authority to appoint civil servants (Feith 1962).

The civil service became closely intertwined with the Golkar Party during former President Suharto's New Order era (McLeod 2008). Following the political transition after his resignation in 1988, the civil service was transformed once again. National and local elections were accompanied by widespread decentralization reforms that reassigned essential government responsibilities to the district level. During this time, over 2 million civil servants, including teachers and healthcare workers, were transferred to district-level governments to shoulder these new responsibilities. Since then, Indonesia's civil service has rapidly grown and has made large strides toward adopting a meritocratic system of recruitment and employment.

Indonesia's civil service currently employs over 4.5 million individuals and is comparable in size to other services in South and Southeast Asia (Tjiptoherijanto 2007). It operates under three national departments and agencies: the Ministry of Administrative and Bureaucratic Reform, the National Institute of Public Administration, and the National Civil Service Agency (*Badan Kepegawaian Negara*, BKN). Law No. 43/1999, which accompanied the 1999 decentralization reforms, codified a merit-based personnel management approach and enabled greater flexibility in supplementing civil servants' salaries. The more recent Law No. 5/2014 outlines the regulatory groundwork for modernizing the civil service

and codifies the assessment of job performance and merit principles. However, concrete changes have been implemented slowly.

Research has shown that the creation of a professional, meritocratic, and efficient administrative structure was a crucial factor in the rapid development of East Asian countries (Amsden 1992; Johnson 1982; Wade 1990). In Japan it enabled the creation of a "plan-rational" model that supported economic development by facilitating flexible decision making and coordination between policy makers and the private sector (Johnson 1982).

A meritocratic system can also lead to important productivity gains within the civil service by hiring and promoting well-educated civil servants who can deliver public goods and services more effectively and efficiently. Although educational attainment may not perfectly reflect civil servants' quality, skill, or ability, a great deal of literature on human capital finds that education is a reliable proxy for skill (or at least the ability to signal skill) (Card 1999).

Enlarging the pool of candidates considered for recruitment and promotion should also improve workforce diversity, which can provide an advantage in solving difficult problems due to differences in perspectives (that is, ways of formulating problems) and heuristics (that is, approaches to problem solving) (Hong and Page 2001; Lazear 1999). There is also evidence that diverse teams are more likely than homogeneous teams to be innovative (Herring 2009). One important form of workforce diversity is gender diversity.

Female leaders in the civil service help to ensure that policies such as child health, nutrition, and childcare receive much greater attention (Duflo 2012). Furthermore, there is evidence that a higher share of women in senior government positions is associated with lower rates of corruption across countries (Swamy et al. 2001). Research on gender quotas in politics has also documented large gains in the quality of political leaders due to increasing female representation (Besley et al. 2017).

Indonesia has introduced gender quotas for female candidates in legislative elections (Shair-Rosenfeld 2012) but not for the civil service. Although female representation in the civil service has improved since the 1970s, the historical pattern of male dominance has continued, which reflects deep-seated societal norms and biases (Azmi, Sharifah, and Basir 2012; Wright and Crockett Tellei 1993). Recent surveys of women in the civil service indicate that they are often overlooked for or reject promotions because they require relocating to rural or remote provinces. Most female civil servants are currently employed as either teachers or nurses.

These trends raise the following questions. Are competent, well-educated civil servants actively promoted within government? Are women well represented within the civil service, and are they promoted to higher positions as often as men? How do these patterns vary among government departments and echelons? The next section describes the data used to address these questions.

Data and Methods

The BKN gave the World Bank access to its civil service database and is collaborating with the Bank's Jakarta office to use the data to help inform civil service policies. The database contains information on all of Indonesia's current civil servants,[1] including their gender, age, educational attainment, place of birth, current workplace, job type, rank, and date of entry into the civil service.[2] There are also data on each individual's work history, which covers the workplace, work location, job type, and associated civil service rank for each official job assignment.

The BKN database is used to construct a panel data set that contains information on each civil servant for each year of observation, and contains 51,674,834 records. The year of observation begins when an individual first entered the civil service and ends in 2015.[3] For example, a teacher who entered the civil service in 1980 would generate a total of 36 civil servant–year observations. Because most civil servants spend their entire career (30–40 years) in government service, the data set covers a large portion of individuals who have been active since the early 1990s.

Gender is indicated using a simple dichotomous variable that denotes whether an individual is identified as female. The educational attainment variable is coded as one of six categories: elementary school, junior high school, senior high school, diploma I/II/III (equivalent to one to three years of college), diploma IV/bachelor (four years of college), and postgraduate degree. Additional variables indicate birthplace, age, total years in the civil service, and rotations within the civil service. A dichotomous rotation variable is used to indicate when

[1] The database excludes retirees, military personnel, police officers, and members of *Badan Intelijen Negara* (State Intelligence Agency).
[2] There is no official information on civil servant salaries, but remuneration is determined by rank, job assignment, and age.
[3] The data are restricted to civil servant years after 1980 to exclude the small number of individuals who serve longer than the mandatory retirement age allows.

a civil servant is reassigned to a new working location. Age and total years of experience are constructed as count variables.

The official echelon classification system is used to measure career progression (see Table 1). The echelon indicates the level of hierarchy an individual has attained in the civil service. Echelon levels for civil servants with management responsibilities (known as structural employees) range from the lowest level of V to the highest levels of Ia and Ib (which include heads of national agencies, director generals, deputy ministers, inspector generals, and deputy cabinet secretaries).[4] Most civil servants (that is, teachers and healthcare workers) have no echelon level because they have no management responsibilities (see Table 1).

An ordinal variable based on this echelon hierarchy ranges from 0 to 11 to indicate career level.[5] This variable is also used to create a dummy variable that records promotion events (coded 1 for each civil servant year with a positive change in the echelon variable and 0 otherwise, because moving up the echelon scale is the most important indicator of career advancement).[6]

[4] Echelon V is included in the analysis, but Indonesia's *Aparatur Sipil Negara* (State Civil Apparatus) no longer recognizes it according to Law No. 5 Year 2014 on Civil Service Apparatus. The highest rank that district government-level civil servants can attain is IIa.

[5] Functional employees (those without management responsibilities) are assigned a 0. A coarser categorical grouping with five outcomes is also considered that combines several echelon ranks.

[6] This career level variable does not reflect automatic advancement along the *golongan* rank, a parallel dimension of career advancement with implications for salary.

Characteristics of Indonesia's Civil Service

GENDER

The data reveal substantial variation in gender balance across government departments. The proportion of women in government departments at the national level ranges from 0.00 to 0.83 (see Tables 2 and 3). The national government departments with the highest proportion of women are Indonesian National Army Headquarters (0.83), National Agency of Drug and Food Control (0.74), and Ministry of Health (0.63). The national departments with the lowest proportion of women are the National Search and Rescue Agency (0.10) and the National Government Internal Auditor (0.10). Three agencies have no female civil servants: the Indonesia Financial Transaction Reports and Analysis Center (0.00), Secretariat General of Corruption Eradication Commission (0.00), and Ministry of Environment and Forestry (0.00).

There is also large variation (from 0.04 to 0.66) in the gender balance between subnational government departments (see Tables 4 and 5). The district-level departments with the highest proportion of women are Pemerintah Kota (Municipal Government) Kotamobagu (0.66), Pemerintah Kabupaten (District Government) Minahasa (0.65), and Pemerintah Kabupaten Batubara (0.64). The district-level departments with the lowest proportion of women are Pemerintah Kabupaten Mamberamo Raya (0.18), Pemerintah Kabupaten Tolikara (0.13), and Pemerintah Kabupaten Intan Jaya (0.04).

Men dominate the functional and structural categories at the subnational level (see Table 6). Women hold 36 percent of functional and 33 percent of structural jobs at this level, as well as 51 percent of the nonfunctional and nonstructural positions.

The variation in gender balance between echelons is small in comparison, but men tend to dominate all echelons. Men hold over 70 percent of all national-level echelon positions (see Table 7). At the subnational level, nearly 91 percent of Echelon 1 positions

are held by men, compared with 58 percent of Echelon 5 positions (see Table 8).

EDUCATION

Educational attainment is coded on a 1–6 scale (1 = primary, 2 = junior high, 3 = senior high, 4 = D1/2/3 or associate degree) 5 = D4/S1 or bachelor's degree, 6 = S2/S3 or master's degree or doctorate). Civil servants' average educational attainment ranges from 3.40 to 5.21 in the 25 largest government departments (mean = 4.41, variance = 0.42; see Tables 9 and 10). The following departments have the highest average education levels in this group: the Ministry of Research, Technology and Higher Education (5.21); Audit Supervisory Agency (5.01); and Ministry of Home Affairs (5.01). The following have the lowest average education levels: Ministry of Communication and Information Technology (3.49), National Police (3.47), and Ministry of Defense (3.40).

These patterns are similar in the 25 smallest government departments (see Tables 11 and 12), where average education attainment ranges from 4.00 to 6.00 (mean = 4.95, variance = 0.47). The following have the highest average education levels in this group: Ministry of Public Works and Housing (6.00), Secretary General of Commission for Supervision and Business Competition (5.50), and Coordinating Ministry for Maritime Affairs (5.41). The lowest are the Secretariat General of People's Consultative Assembly (4.29), Secretariat General of the National Security Council (4.07), and the National Army Headquarters (4.00).

Within each echelon, average educational attainment across national departments is as follows (see Table 13): Echelon 1 (5.71), Echelon 2 (5.76), Echelon 3 (5.65), Echelon 4 (5.45), and Echelon 5 (3.71). Within each echelon across subnational departments, average education attainment is as follows: Echelon 1 (5.72), Echelon 2 (5.73), Echelon 3 (5.64), Echelon 4 (4.48), and Echelon 5 (3.25). There are few differences in average education between men and women within echelons across all departments.

JOB TYPES

The most popular civil service job is teacher (*guru*), which comprises 26.43 percent of the national-level positions and 63.87 percent of subnational positions (see Tables 14 and 15).

AGE

The average age of civil servants is 45 years across all echelon positions in all government departments. The average age of men and women is similar within each echelon: Echelon 1 (51 for both), Echelon 2 (45 for women and 42 for men), Echelon 3 (42 for both), Echelon 4 (45 for both), and Echelon 5 (47 for both).

The department with the largest number of people aged 20–30 is the Ministry of Finance (23,815) (Table 16). The Ministry of Religious Affairs has the largest number (42,101) of civil servants between the ages of 51 and 60 (see Table 17), followed by the Ministry of Research, Technology and Higher Education (38,834), which also has the largest number of staff (6,272) over the age of 60 (see Table 18).

RETIREMENTS

The number of retirements as a percentage of total civil servants is expected to increase from 0.03 in 5 years to 6.41 in 10 years, 22.00 in 15 years, and 39.47 in 20 years (see Table 19). For each period, a greater percentage of men than women is expected to retire, although this declines over time. The ratio of male to female retirees is 2 to 1 in 5 years, 1.9 to 1 in 10 years, 1.65 to 1 in 15 years, and 1.5 to 1 in 20 years.

Likewise, a greater percentage of structural than functional civil servants is expected to retire for all periods. The percentage of structural retirees is expected to be 11.42 in 5 years, 30.80 in 10 years, 44.98 in 15 years, and 65.06 in 20 years. The percentage of functional retirees is expected to be 0.01 in five years, 6.36 in 10 years, 21.96 in 15 years, and 39.42 in 20 years. Over 20 percent of civil servants in the

Ministry of Research, Technology and Higher Education will retire in the next 10 years. In the next 10 years, 54.3[7] percent of teachers and 3.2 percent of medical personnel will retire.

BIRTHPLACE

The Shannon Diversity Index is used to calculate the diversity of birthplaces within government departments.[8] The most diverse government department by province of birth among the 25 largest departments is the Ministry of Religious Affairs (12.12), and the least diverse is the Secretariat General of the General Election Commission (8.32) (see Table 20). Among the 25 smallest government departments, the most diverse is the National Resilience Institute (5.63), and the least diverse is the Ministry of Public Works and Housing (0.59) (see Table 21).

The government department with the highest proportion of civil servants who work in the same province in which they were born is the Ministry of Religious Affairs (80 percent) (see Table 22). By comparison, only 9.4 percent of Indonesian Creative Economy Agency civil servants work in their birthplace province.

The proportion of all civil servants who are not from Java has grown from 0.48 in the 1980s to 0.62 in the last seven years. The most common birthplaces of Echelon 1 civil servants were Java Island around central and west Java, Jakarta, and Banten. Only one other region (northwestern Sumatra) was the birthplace of more than 10 Echelon 1 civil servants, although several other regions had 5–10 individuals. Almost all other regions in Sumatra, Borneo, Sulawesi, Lesser Sunda Islands, Sumba Island, Timor, Maluku, and Papua and West Papua were the birthplace of zero or 1–2 Echelon 1 civil servants.

GEOGRAPHIC DISTRIBUTION

There is noteworthy variation in the distribution of civil servants across the country. Figure 1 reveals that the number of civil servants per 1,000 working-age people is less than 10 to 1,000 people in most parts of the country, but it is much higher in some regions, especially in the eastern islands. The number of civil servants per 1,000 working-age people is 50–100 in many parts of Papua and West Papua and the Maluku Islands, and exceeds 100 per 1,000 in some parts of Papua and West Papua.

Figure 2 illustrates a similar pattern in the percentage of the total population that is civil servants. This ranges from 0–2 percent in most parts of the country, especially in Java and Sumatra, but reaches over 4 percent in northern Papua and West Papua and the Maluku Islands.

To further illustrate this pattern, the number of medical personnel per 1,000 people is greatest in Papua and West Papua, reaching over five people in some areas and 3–5 in other areas, as shown in Figure 3. In most other parts of the country, it ranges from 0–3 people: it ranges from 1–2 people in most parts of Sumatra, 0–1 in Java, and 1–3 in Borneo and Sulawesi.

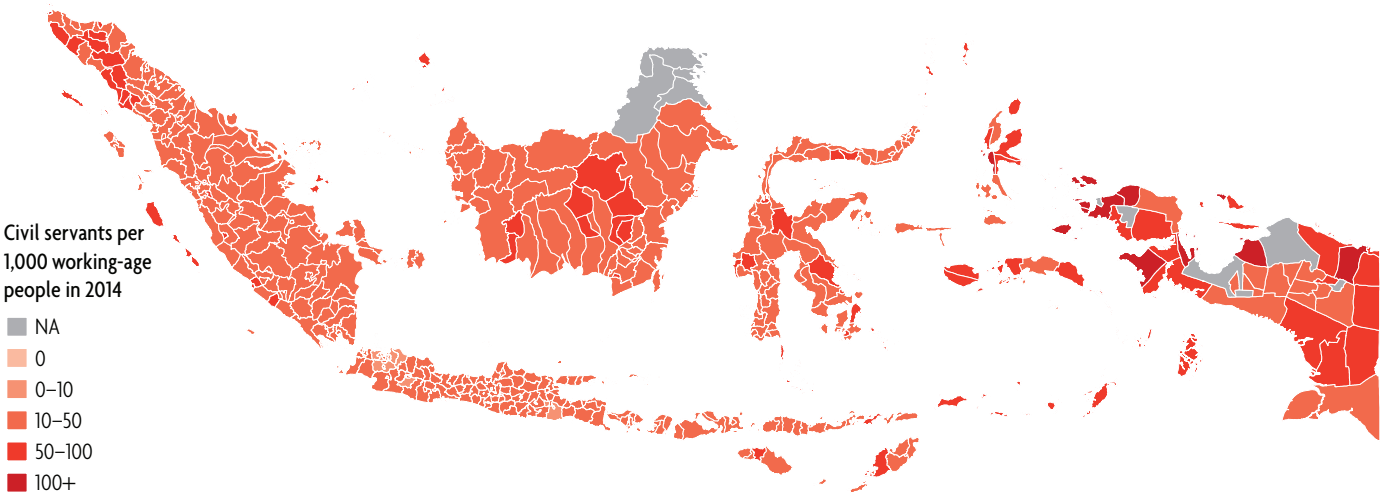
The number of midwives per 1,000 people closely mirrors the distribution of medical personnel. It is highest in Papua and West Papua, at 4–12 people in some areas and 3–4 in others, as shown in Figure 4. In most other parts of the country, it ranges from 0–3 people, including 1–2 in Sumatra, 0.06 to one in Java, and 1–3 in most parts of Sulawesi and Kalimantan.

Figure 5 shows that the number of civil service teachers per 1,000 people is highest in parts of the eastern islands.

[7] The team uses a retirement age of 58 for teachers, 65 for medical personnel, 65 for functional employees, 58 for structural employees, and 60 for those in Echelons 1 and 2.

[8] The index is computed as follows: $-\sum_{i=1}^{s} p_i \ln p_i$, where p_i is the fraction of individuals of one type (i.e., province of birth) within a department divided by the total number of individuals within the department. A more diverse department will have a higher index score. For example, with three provinces and 30 individuals, a department in which p1 = 10, p2 = 8, and p3 = 12 would be calculated $-1 * (0.33 * \ln(0.33) + 0.267 * \ln(0.267) + 0.4 * \ln(0.4))$, for a diversity index of 1.08. For a more homogenous department of three provinces and 30 individuals, with and p1 = 24, p2 = 3, and p3 = 3, the calculation would be $-1 * (0.8 * \ln(0.8) + 0.1 * \ln(0.1) + 0.1 * \ln(0.1))$, or a diversity index of 0.64.

FIGURE 1 Number of Civil Servants per 1,000 Working-Age People per District (2014)



It ranges from 11.3 to 51.51 in parts of Papua and West Papua and the Maluku Islands. Parts of central Borneo and north Sulawesi also show a high number of teachers per 1,000 people, but most parts of the country fall between 0.71–6.05 and 6.05–7.67.

Figure 6 shows that there is large variation in the average education of medical staff across the country. The greatest variation is in parts of eastern Sumatra (4.75–5 percent), Java and central Java (4.75–5 percent), eastern Kalimantan (4.75–7 percent), south Sulawesi (4.75–5 percent), and Nusa Tenggara Barat (4.75–5 percent). Surrounding these regions are areas that range from 4.5 to 4.75 percent, especially in Sumatra, Java, and Borneo and Sulawesi. The regions with the lowest variations are once again in West Papua and Papua, where it is 3–4 percent.

Figure 7 shows the variation in average teacher education, which fares slightly better. In most parts of the country, such

FIGURE 2 Percentage of Civil Servants as a Share of the Population, by District

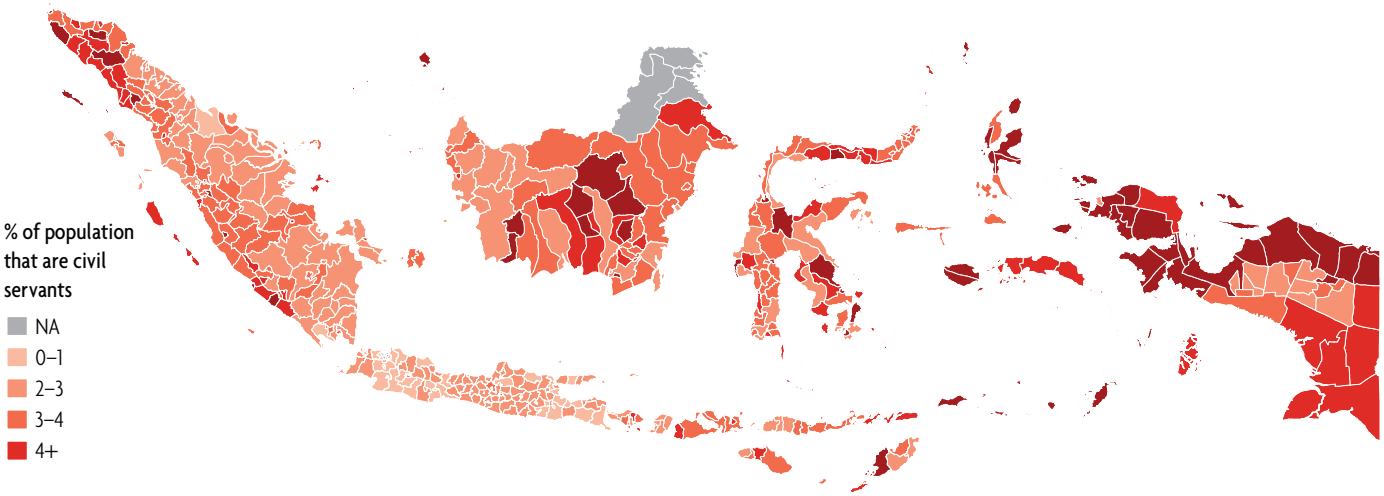


FIGURE 3 Number of Medical Personnel per 1,000 People

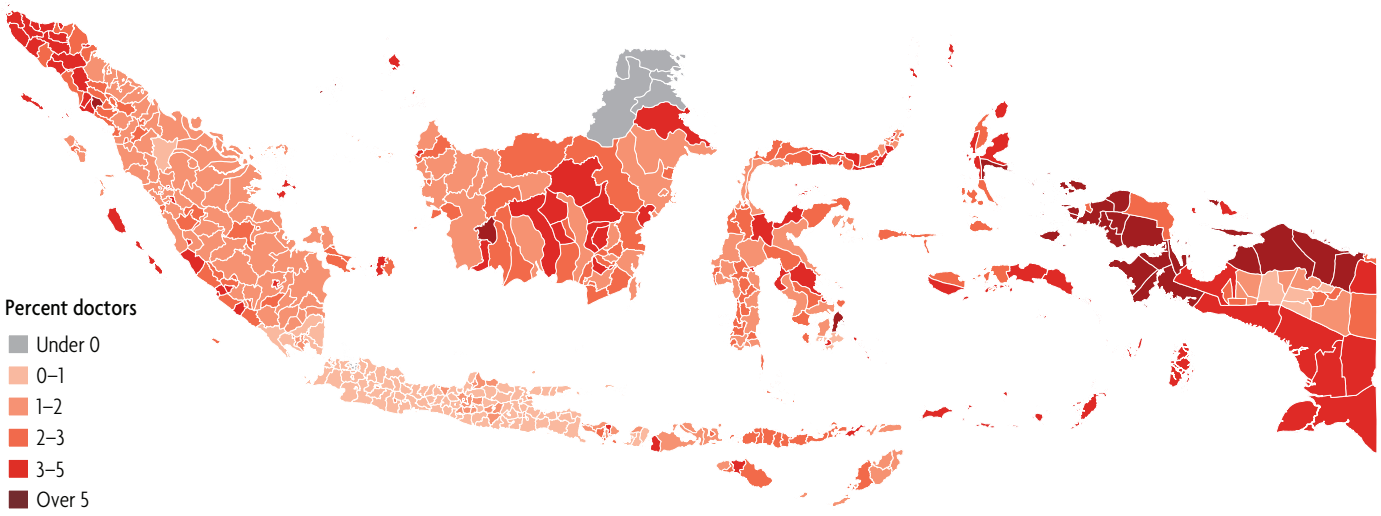


FIGURE 4 Number of Midwives per 1,000 People

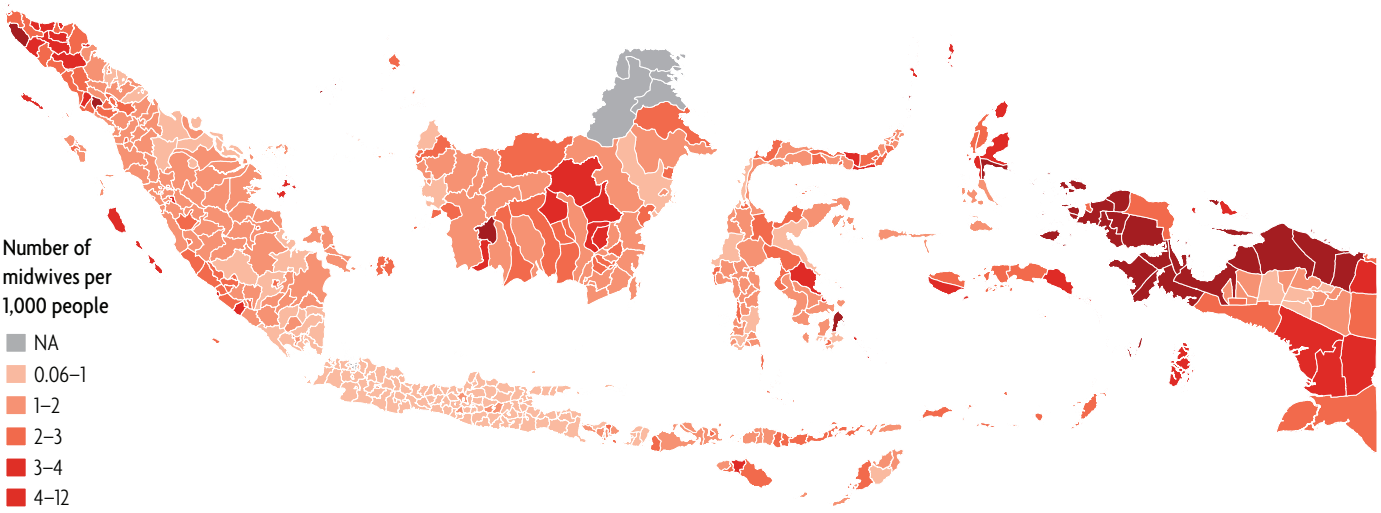


FIGURE 5 Number of Teachers per 1,000 People

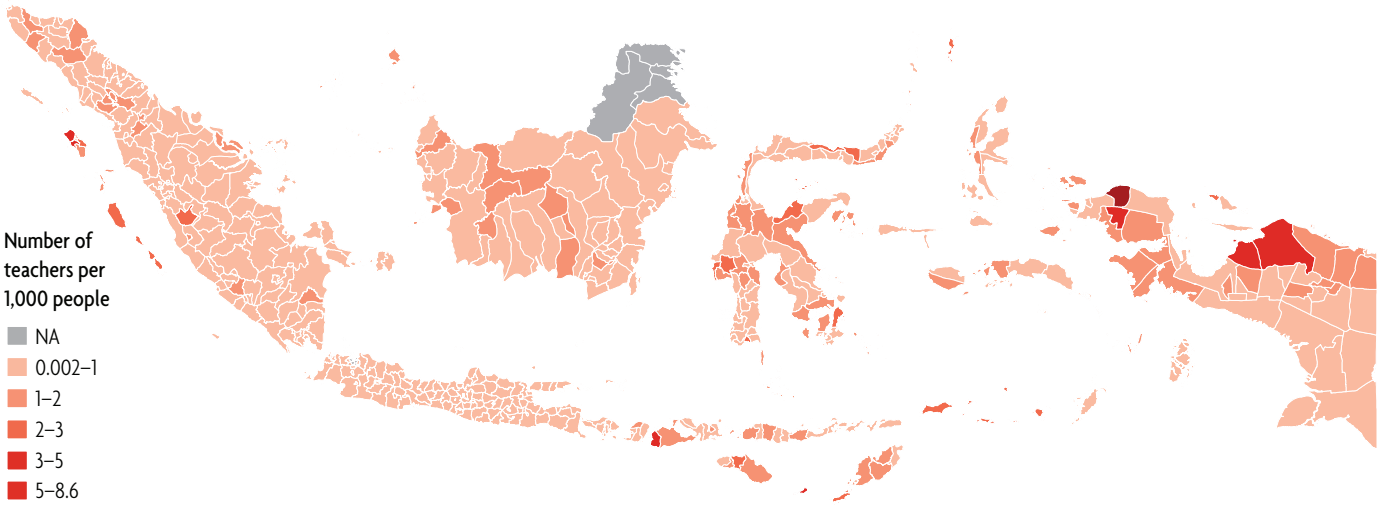
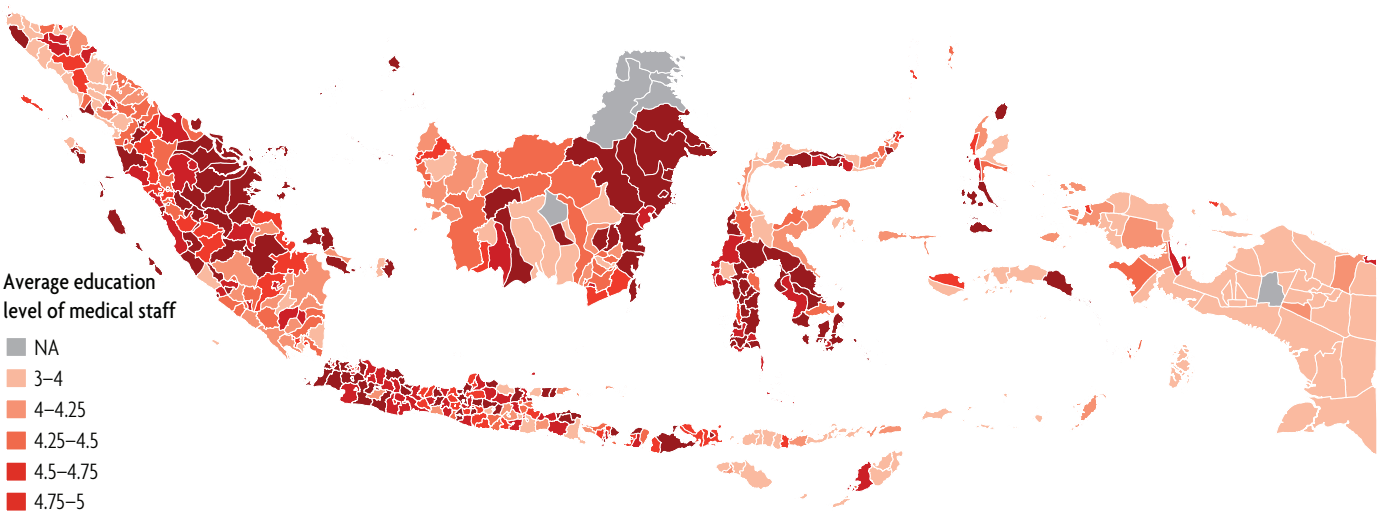


FIGURE 6 Average Education Level of Medical Staff



as in Borneo, Sumatra, and Sulawesi, it is 3–4 years. It also reaches 3–4 years in Papua and West Papua, but in most parts of Java and southwest Sulawesi, western Sumatra, the average teacher education level is a bachelor's degree or higher. With the exception of Papua, all regions of the country have areas in which the average teacher has some college education.

Overall, these maps reveal the dramatic degree of geographic variation in the density of civil servants across Indonesia. It is noteworthy that the eastern parts of the country have a relatively high number of civil servants relative to the size of the local population. This is likely a function of the extremely high population density on Java. Poverty is also highest in this region, possibly requiring

FIGURE 7 Average Education Level of Teachers

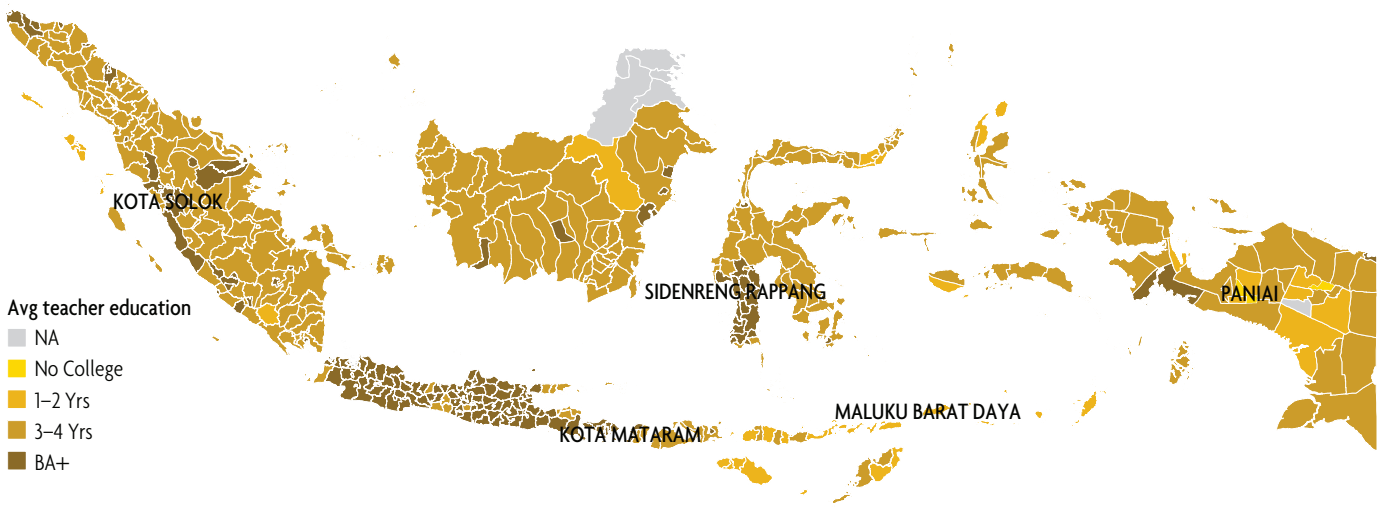
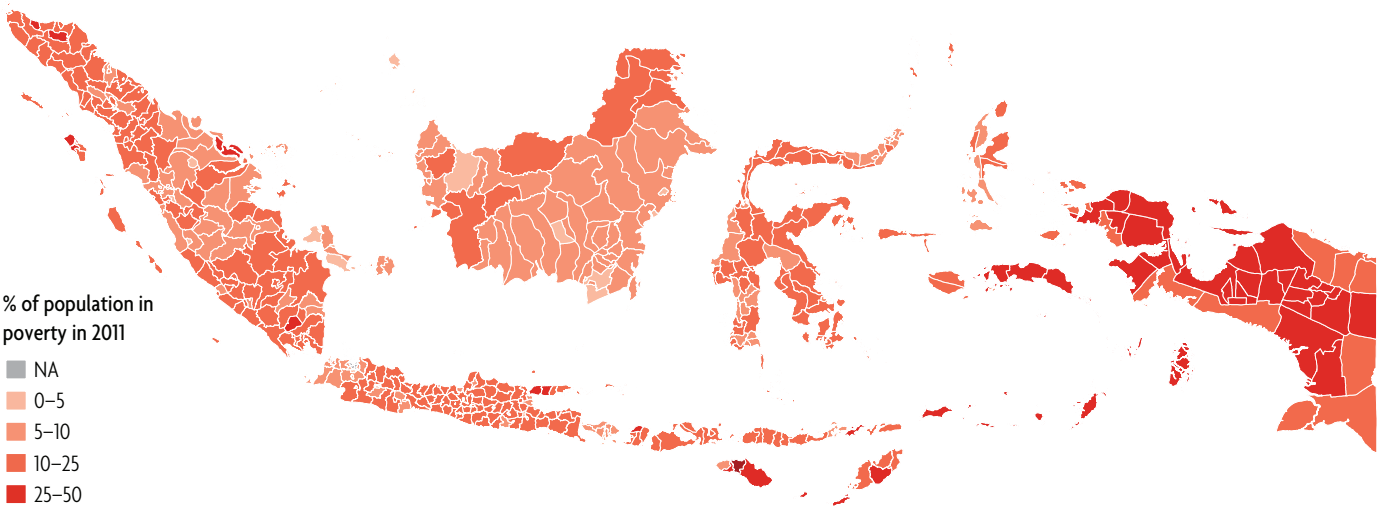


FIGURE 8 Percentage of Population Below the Poverty Line (2011)



higher degrees of state intervention. Figure 8 shows that 25–50 percent of the population in Papua and West Papua and Maluku Islands lives in poverty. Poverty is also high in parts of the Lesser Sunda Islands, especially on Sumba Island and Timor, but all other regions, including Sulawesi, Sumatra, and Java, have moderate levels of poverty (0–10 percent).

This geographic distribution is also reflected in several social welfare indicators. As shown in Figure 9, the share of households with access to safe sanitation is lowest in the eastern regions, especially in central Papua and Maluku, where it ranges from 0 to 20 percent. It is also low in some rural parts of Borneo, Sumatra, and Sumba Island and is generally high in the urban parts of Java around

FIGURE 9 Percent of Households with Access to Safe Sanitation (2011)

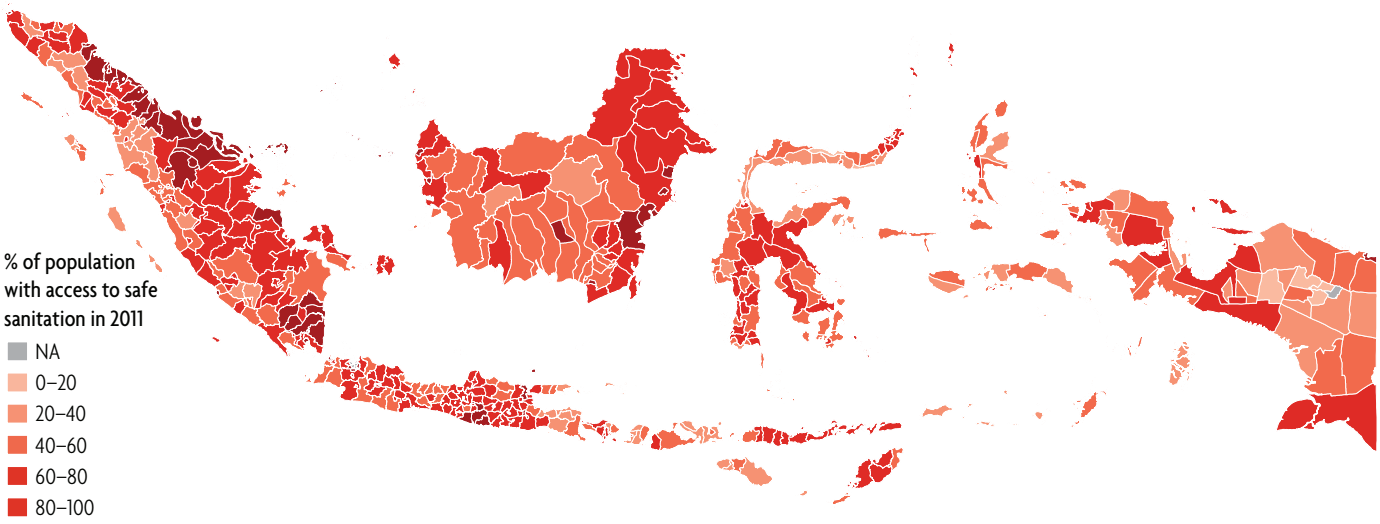
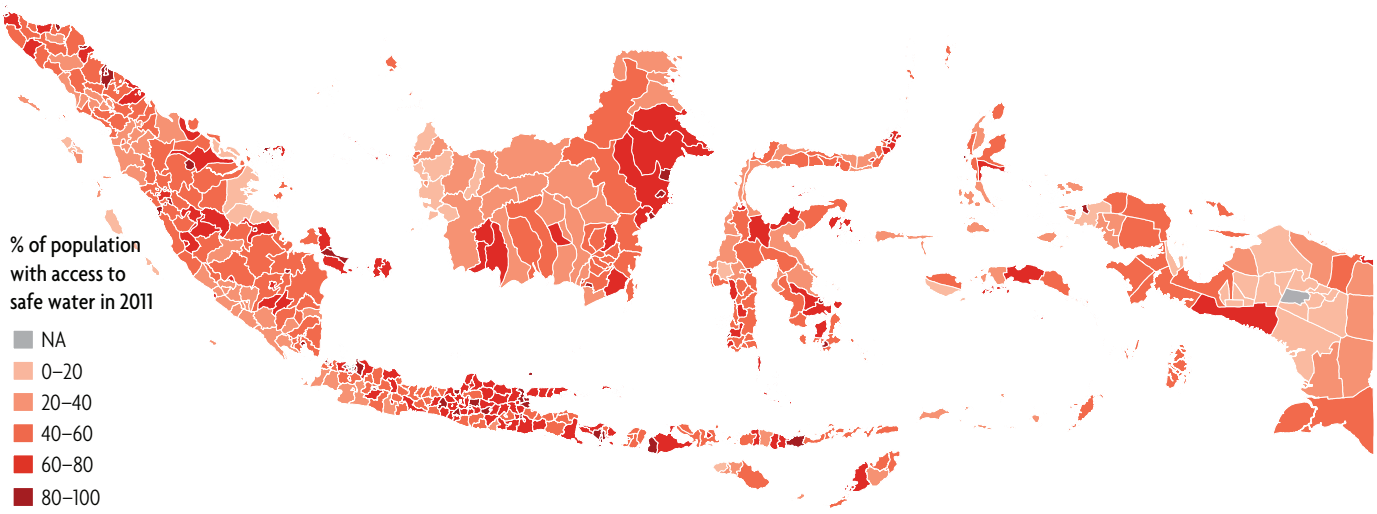


FIGURE 10 Percentage of Households with Access to Safe Water (2011)

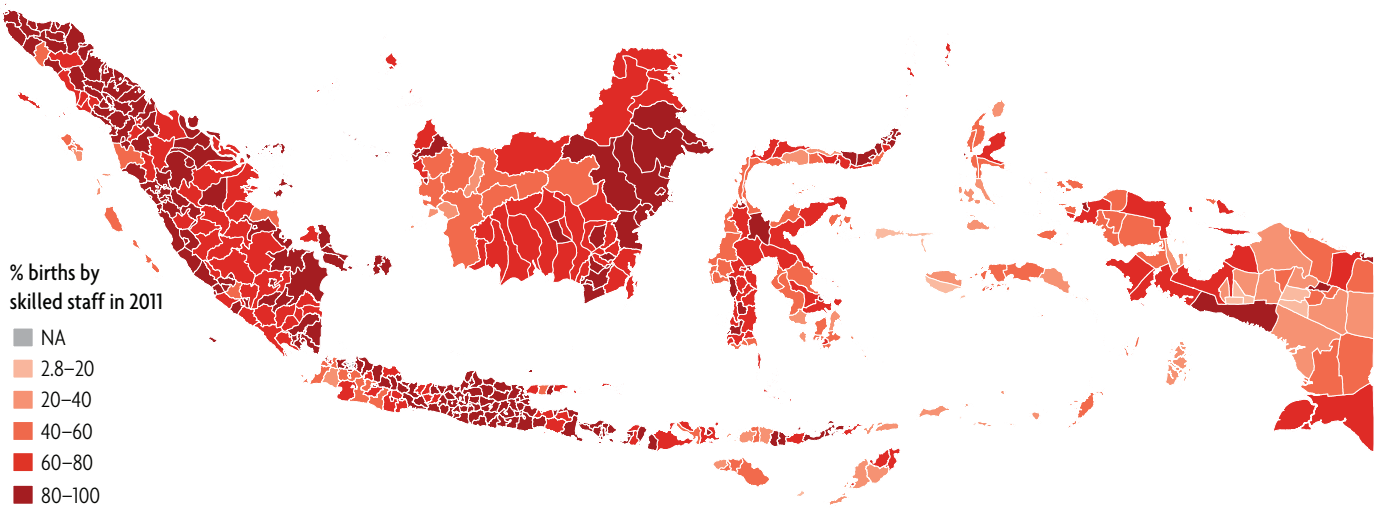


Yogyakarta (80–100 percent) and Jakarta and Bandung (60–80 percent), in south Sulawesi in Makassar (60–80 percent), and Sumatra in the northeast around Medan (80–100 percent).

Figure 10 displays similar results regarding access to safe water. The share of households with access to safe water is lowest in the central parts of Papua, where it ranges from 0 to 20 percent. It stands at 0–20 percent or 20–40 percent in several regions, including central Borneo and Eastern Sumatra, but it ranges from 40 to 60 percent in most other parts of the country. It reaches 80–100 percent in urban areas around Jakarta, central Java, and Balikpapan in Borneo. Access to safe water surrounding these areas is 60–80 percent.

Finally, the percentage of births attended by skilled staff is high in most regions of the country, as shown in Figure 11. It

FIGURE 11 Percentage of Births Attended by Doctors and Midwives (2011)



ranges from 80 to 100 percent in central Java and parts of Java near Jakarta, eastern Borneo, many parts of Sumatra, and parts of other major islands. It is lowest in rural Papua, where it ranges from 2.8 to 40 percent.

These patterns show the importance of ensuring that civil servants are not only available to serve the public where there is greatest need (particularly in the eastern provinces) but also that they are well qualified and effective at performing their jobs.

ROTATIONS

A rotation is when a civil servant is assigned to a new working location. Rotation rates are relatively similar between men and women across education levels and echelons. Figure 16 shows that rotation rates within the civil service peaked in 2001 because of the reassignment of many civil servants to district governments but have steadily declined since. This trend is discussed in greater detail in the next section.

Rotation rates increase for civil servants as education levels increase. For men (women) with a primary school education, the rotation rate is 4 (6) out of every 1,000 in a given year. But for civil servants with a master's degree or doctorate, the rotation rate is 75 (65) out of every 1,000.

Men who rank high on the echelon scale experience fewer rotations than those ranked lower. The rotation rate is 0.056 for Echelon 0 and 0.023 for Echelon 4. Rotation rates start to decrease for women as the echelon increases, but they increase at the highest echelon. The rotation rate for women is 0.053 for Echelon 0 and 0.055 for Echelon 4.

The government departments with employees who have the most job changes are the Ministry of Law and Human Rights (0.281 average job changes), Supreme Court of the Republic of Indonesia (0.175) and Audit Board of the Republic of Indonesia (0.170). The departments with the fewest job changes are: the Secretariat General of the General Election Commission (0.068), Ministry of Marine and Fisheries, (0.067) and Ministry of Tourism (0.057). See Table 23 for the departments with the largest average number of rotations.

District governments with the highest rotation rates are Labuhan Selatan, Kolaka Timur, and Buton Tengah, and those with the lowest rates are Nduga, Sarmi, and Tolikara. For teachers and medical personnel, the rotation rates are 0.04 and 0.01, respectively.

CONCLUSION

In summary, the data show large variation in gender balance between government departments at both the national and subnational levels. The proportion of women ranges from 0.00 to 0.83 at the national level and from 0.04 to 0.66 at the subnational level. Men tend to dominate the composition of echelons at both levels, particularly in higher echelons at the subnational level, where the proportion of men rises from 0.58 percent in Echelon 5 to over 90 percent in Echelon 1.

The data also show large variation in educational attainment between government departments. Among the 25 largest government departments, it varies by two education levels on average, ranging from 3.40 to 5.21. Among the 25 smallest government departments, it varies by a similar amount, rising from 4.00 to 6.00. Education levels are relatively consistent among echelons at the national level but vary considerably at the subnational level.

Larger government departments appear to employ a more diverse workforce by province of birth than do smaller departments, and lower echelons appear to be more diverse than higher echelons. Finally, job rotation rates appear to increase as education levels increase and to decrease for both men and women as echelon increases, except for women at the highest echelon, for whom they increase. The next section examines this variation to more formally explain the promotion of civil servants.

Explaining Civil Service Promotions in Indonesia

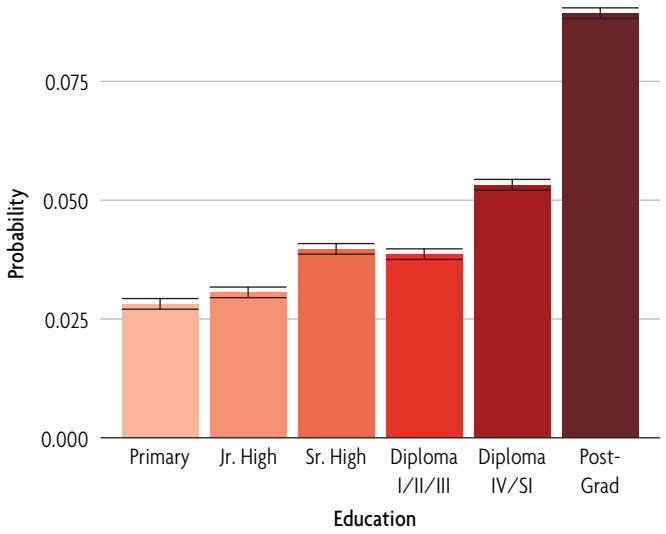
This section assesses the effects of individual-level civil servant characteristics on promotion patterns throughout a career. It estimates a simple regression model that takes the echelon level or a promotion event as outcome measures. Career advancement is modeled as a function of a civil servant's educational attainment, gender, work experience, and age. Additional fixed effects are included to control for province of birth, current department, and time:

$$y_{idpt} = \gamma_d + \eta_p + \tau_t + x_{it}\beta + \ + \varepsilon_{idpt},$$

Where y_{idpt} is an outcome measure that indicates career progression for individual i at time t, γ_d is a civil service department fixed effect, η_p a province-of-birth fixed effect, and τ_t a year fixed effect. x_{it} is a vector of individual-level controls for gender, age, years of work experience, and dummy variables for educational attainment (elementary school is the reference category). Civil service department fixed effects are included to control for unobserved confounders. For example, some departments such as the central bank might be populated by individuals with high levels of educational attainment and have many high-echelon positions. Province-of-birth fixed effects are included to control for the influence of cultural and ethnic networks in the civil service. Year fixed effects are included to account for secular changes in promotion patterns. The model is estimated using ordinary least squares with standard errors clustered at the individual level. A more conservative model also includes individual-level fixed effects, which absorb the individual-level covariates and province-of-birth fixed effects. The results are robust to this specification.

This analysis reveals two main findings (see Tables 24–26). First, Figure 12 shows that educational attainment has a positive and statistically significant effect on the probability of promotion, which suggests that Indonesia's civil service recognizes merit in practice, elevating highly skilled civil servants to leadership positions. For example, having a bachelor's degree increases the probability of promotion in any given year by 2 full percentage points above baseline. An advanced degree increases the likelihood of promotion by a staggering 6 percentage points.

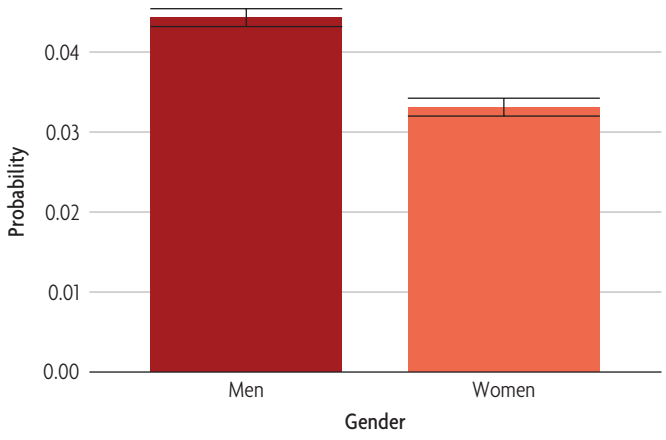
FIGURE 12 Probability of Promotion by Education Level



Probabilities calculated by averaging over all observations and varying the education.

Second, female civil servants are, on average, less likely to be promoted than are their male counterparts (Figure 13). Controlling for age, work experience, educational attainment, province of birth, and current department, women are about 1 percentage point less likely than men to be promoted in a given year. This promotion penalty is substantial, given the low baseline probability of promotion, and is similar in magnitude to obtaining several years of college education.

FIGURE 13 Probability of Promotion by Gender



Probabilities calculated by averaging over all observations and varying the gender.

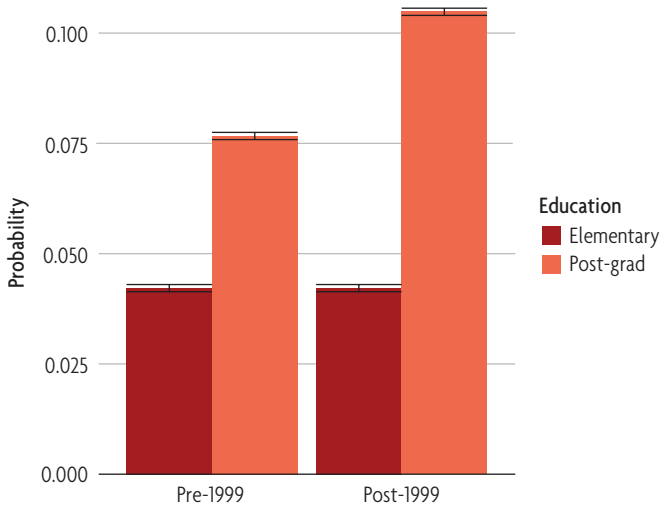
To analyze these two findings, this report assesses whether the premium for education and the penalty for gender have changed in the aftermath of democratization in 1999: that is, whether the introduction of democratic accountability intensified the application of meritocratic norms in the civil service. The regression analysis is repeated adding interaction terms between education and gender and a post-1999 binary variable to isolate changes in the effects of education and gender. To strengthen causal identification in these models, they add individual-level fixed effects to compare career trajectories before and after 1999 for the same individuals.

The model facilitates a causal interpretation of the political transition's influence on promotion patterns. Although there was news of President Suharto's declining health and rumors that he would leave office, the timing of his departure and the regime's transition following the Asian financial crisis were unexpected (Pepinsky 2009; Fisman 2001). It is therefore unlikely that the ruling coalition changed its approach to promoting civil servants in anticipation of the transition. Any post-1999 changes in promotion patterns should thus be attributed to reforms by the newly elected regime that gained control of civil service appointments. Furthermore, nearly all individuals in the military, civil service, and ruling party retained their positions after the transition (Hadiz 2004), which makes it possible to observe changes in promotions within the Indonesian civil service that were caused by the transition.[9]

This regression also finds that educational attainment had a positive and statistically significant (below the 1 percent level) effect on promotions before 1999 (Figure 14). Civil servants with a postgraduate degree are 4 percentage points more likely to be promoted in a given year—a 200 percent

[9] Because recruitment patterns might have shifted after 1999, a subsample of the data that includes only individuals hired before 1999 is also analyzed to address this concern. These individuals were subject to the same recruitment process. This permits comparisons of career trajectories before and after the political transition for the same individual.

FIGURE 14 **Probability of Promotion by Educational Attainment**



increase in the relative probability of promotion because the unconditional probability of promotion in the sample is only 1.5 percent.

The results also indicate that the premium for educational attainment has increased since 1999 for almost all categories of education above elementary schooling and rises more as the level of attainment increases. A civil servant with a postgraduate education is now twice as likely to be promoted as before 1999 (an increase of 3 percentage points). This increase in the premium placed on education is 1–3 percentage points across additional models that were estimated to check the robustness of the results, suggesting an increase in meritocratic practices in Indonesia's civil service.[10]

FIGURE 15 **Probability of Promotion, by Gender**

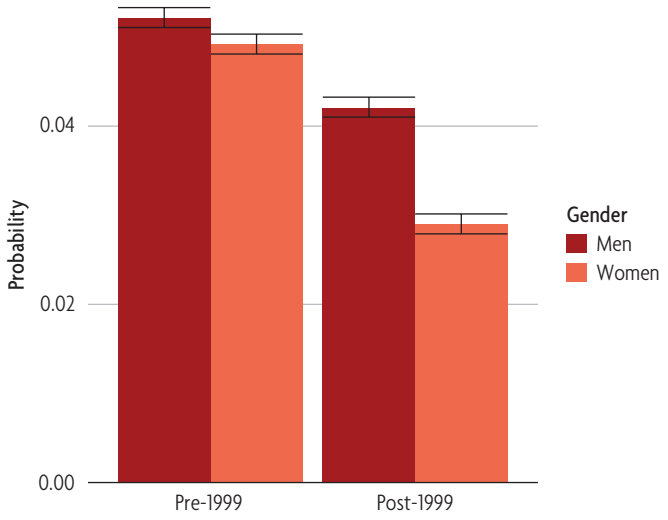


Figure 15 shows that the gender penalty for women increased by 1 percentage point after 1999. Before 1999, women were 0.2 percentage points less likely to be promoted, on average, than men, holding all else constant. This represents a 13 percent penalty compared to the unconditional probability of promotion. This penalty increased by a full percentage point, representing a fivefold increase in the penalty.

One important factor that might affect women's civil service career prospects is the extent to which female leaders make promotion decisions. Therefore, the share of women at the highest echelon ranks (Ia and Ib) is included as a control variable in the models. This variable is also interacted with the gender and political transition variables. This produces two noteworthy results. First, female leaders tend to promote more civil servants after the 1999 political transition compared to before. Second, female leaders in the civil service are more likely to promote men than women.

Several additional models are once again estimated to check the robustness of these results, and the findings are nearly identical to those described previously: the gender penalty has increased since 1999, and the estimate of the interaction term is the same (–0.01). This relationship appears to hold regardless of the model specification or sample.

Analysis of promotions to specific echelon ranks reveals some evidence of heterogeneous effects. Although female civil servants overall experience a promotion penalty, the

[10] The full results are available in the Appendix.

FIGURE 16 **Proportion of Civil Service Employees Rotated each Year, by Education Level**

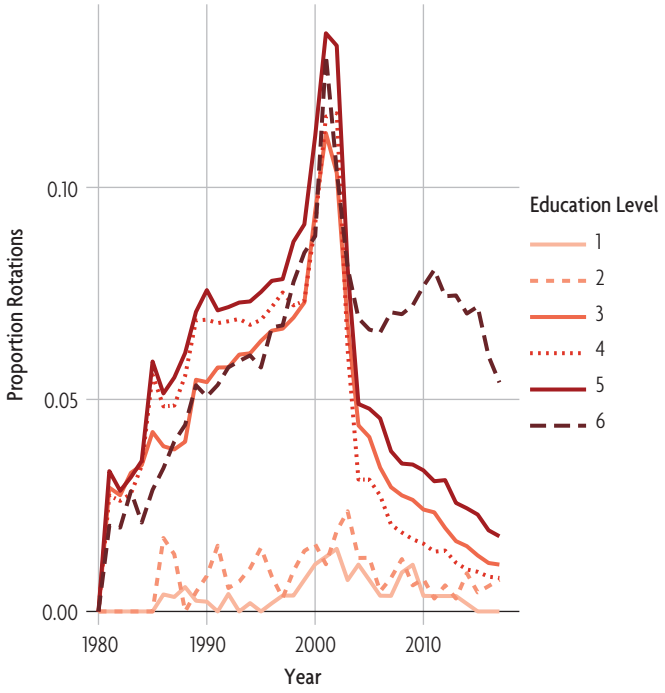
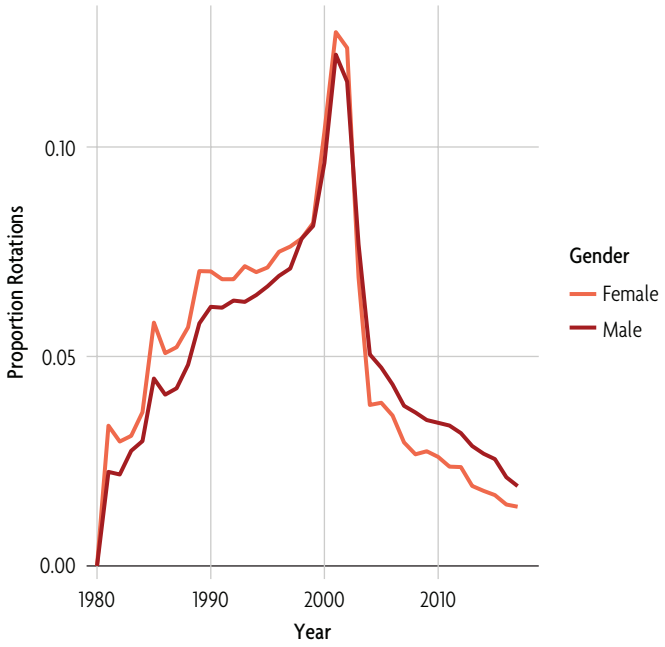


FIGURE 17 **Proportion of Civil Service Employees Rotated each Year, by Gender**



pattern is most pronounced for initial steps on the career ladder. Once women have been promoted to a fairly high echelon rank, additional promotions are not subject to a penalty: there is even some evidence that for promotions to echelons Ia and Ib women enjoy a slight advantage. This suggests that efforts to mitigate gender discrimination in Indonesia's civil service are likely to be most relevant in the early stages of women's careers.

ROTATIONS

A third way to investigate whether civil service promotions are merit based is to analyze job rotation patterns—when a civil servant is reassigned to a new working location, which can often follow or lead to a promotion. Figure 16 shows the proportion of rotations by education level over time. As expected, rotations are more common for less educated civil servants and spiked in 2001 in the wake of the decentralization reforms. Figure 17 shows that there are few gender differences in rotation rates over time.

In a meritocratic system, more qualified individuals should be more likely to be awarded job rotations, and men and women should have equal opportunities for rotations. The model shown is also used to examine the determinants of job rotations within the civil service, using the same regression specification as before but focusing on job rotations as the dependent variable.

The results of this analysis reveal that educational attainment increases rotation rates among civil servants, holding all else constant. Having a senior high school or college education increases the probability of getting a job rotation by 4–6 percentage points. This premium is slightly lower for civil servants with a postgraduate education, which increases the probability of getting a job rotation by 2 percentage points. However, the educational premium appears to disappear after the 1999 political transition. Civil servants with a senior high school or college education are 3–4 percentage points less likely to be rotated after 1999

compared to before. This rate does not change for civil servants with a postgraduate education.

The results show that women are just as likely to experience a job rotation as men. The difference in probability is 0.1 percentage points, and the estimate is statistically insignificant. Furthermore, the results show that civil servants in higher echelon levels are less likely to be rotated, but the size of this change is small. An increase in echelon level reduces the probability of being rotated by 0.2 percentage points (see Table 27).

CONCLUSION

The results suggest that the civil service has made important progress in becoming more meritocratic in some ways. Educational attainment was valued before 1999, and it has become an even more important determinant of civil servant promotions in recent years. However, holding all else constant, women are even less likely to be promoted now than before 1999.

Several additional tests were performed to evaluate the sensitivity of the results. First, the models were estimated using an ordinal echelon variable that ranges from 0 to 11 as the dependent variable, which did not change the substantive findings. Second, additional models that interacted the education and gender variables with year dummies were estimated to trace the effect of these variables over time, and these results strongly support the initial findings.

The analysis was also extended to uncover additional insights into the mechanisms driving the results. To determine whether the impact of the 1999 political transition is being driven by the corresponding regime change or the 2001 decentralization reforms, the sample was restricted to national government departments and agencies. The main results hold after making this change, which indicates that they are not being driven by the decentralization reforms.

Another important question is whether the gender penalty can be interpreted in a different way. To address this question, two alternative scenarios are considered. First, it could be that the 1999 political transition increased the demand for highly educated civil servants, and fewer women were promoted because there were fewer highly educated women. The findings would then reflect a lack of qualified women rather than a gender-based disadvantage. To explore this possibility, triple interaction terms were estimated among gender, education, and the post-1999 variable. The results reveal that the gender penalty persists even among women with high levels of education. Second, if female civil servants gained new labor market opportunities after 1999 and exited the civil service, the results could then be driven by a decrease in highly qualified women in the civil service. This is unlikely to be the case because there is no indication in the data that women exited the civil service in greater numbers after 1999. Other research also suggests that non-civil service labor market opportunities have not increased for women in the post-1999 period (Buchori and Cameron 2012).

Discussion and Recommendations

Three policy areas merit more government attention and response: the promotion penalty women face; the low rates of rotation across districts and the inequitable geographical distribution of skilled civil servants; and planning for upcoming retirements in ministries, agencies, and subnational governments.

First, increasing gender diversity within the higher ranks of the civil service would yield many benefits, including less corruption, enhanced innovation and problem-solving capabilities, and more gender-sensitive policies and programs. The potential for Indonesian women to be a substantial engine for economic growth, service delivery, and poverty reduction is not being fully realized. Despite the overall increase in employment opportunities and substantial gains in girls' access to, and participation in, education over the past few decades, Indonesian women still participate significantly less than men in the labor market. Indonesia currently has 86.3 million women of working age (33.5 percent of the total population) who do not work outside the home. Women occupy fewer than 28 percent of Echelon 1–4 civil servant positions.[11]

To equalize promotion opportunities for women and increase their overall representation in echelon positions, the GoI could consider three interventions: a leadership program with training and mentoring, recruitment strategies, and high-level policy dialogue on the need for equity in promotions.

First, the GoI could support a flagship leadership program to help identify young talent that could enter the echelon scale and ensure there are sufficient numbers of women in talent pools for promotions. The GoI could help women develop leadership skills and find new opportunities in the workplace through organized social networking events. The program

[11] We assessed whether there is a relationship between the portion of women in the civil service at the district level and the following civil service outputs: the overall quality of public services provision (measured via an index), poverty rates, the number of births attended by skilled staff, enrollment rates, the share of asphalt roads, access to safe water and sanitation, and educational and health expenditures. We find some evidence that a higher share of female civil servants is associated with lower poverty rates, an increase in births attended by skilled staff, and a higher share of asphalt roads in the district. Given that these results do not measure causal effects and are not consistent across all indicators and specifications, we left this analysis out of the report.

could pair female civil servants with mentors—successful civil service leaders—to help them take advantage of career opportunities and solve complex issues. Second, the GoI could partner with top Indonesian universities (see Table 28) to identify and recruit promising undergraduate and graduate students and encourage them to apply to the civil service. Third, BKN could convene a dialogue among high-ranking civil servants in the largest national ministries to discuss the promotion penalties, including the barriers to rotation that women face; identify solutions; and formulate a commitment to implement them. The policy dialogue should include a careful legal review of the existing regulations governing promotions to ensure that they are gender neutral.

The second policy area relates to the low rate of rotations across the civil service (see Table 29). For civil servants with a master's degree or doctorate, the rotation rate is 0.075 for men and 0.065 for women. The rotation rate is 0.053 for Echelon 0 and 0.055 for Echelon 4. At the subnational level, the rotation rate is generally low, between 0 and 0.18. For teachers and medical personnel, the rotation rates are 0.03 and 0.006, respectively. At the same time, there is a large discrepancy in the educational background of frontline service providers across Indonesia. For example, medical personnel in Papua and West Papua have substantially lower rates of educational attainment than their peers in Java. Similarly, better-qualified and experienced teachers are concentrated in wealthier regions. For example, over 67 percent of teachers in Java have a four-year university degree, compared with only 54 percent in Papua and West Papua.

Increasing the rotation of highly skilled service providers into poor and remote regions could help reduce malnutrition and maternal mortality, improve learning outcomes, and ensure that knowledge and skills transfers occur between the more and less skilled. Poor and remote regions have inadequate and less-skilled service providers, who often receive little exposure to training and/or career advancement. The GoI has experience with offering incentives to civil servants, including health workers and teachers, to rotate into these areas. For example, teachers working in remote areas, including in poor or conflict-affected areas, receive a special allowance (*Tunjangan Khusus*), which is worth the equivalent of one month's wages. Yet various studies have shown that these incentives have not corresponded to improvements in teacher performance or student learning outcomes (SMERU, 2010; World Bank, 2014, 2015; De Ree et al., 2015). Moving forward, to improve the incentive system, the GoI could link the incentives for civil servants to rotate into remote regions with performance-based measures (for example, service performance measures and community feedback). A performance-based incentive system for civil servants to rotate into remote regions would be fully consistent with the Civil Servant Law (UU 5/2014), which aims to put in place a merit-based bureaucracy system by encouraging the adoption of performance-based evaluation and the use of performance-based incentives for civil servants. Currently, the Ministry of Education and Culture, with support from the World Bank, is implementing a pilot known as KIAT Guru. If the pilot is effective, the GoI could consider tailoring and expanding the system nationwide and to health and other sectors.

Third, the upcoming wave of retirements presents an opportunity for BKN to develop a strategy to address the promotion penalty and distribution issues (see Tables 30 and 31). Over 40 percent of Jakarta Pusat's and Jakarta Selatan's civil servants will retire within the next 10 years (see Table 32), as well as 10 percent of DKI Jakarta's midwives (Table 33). Over 23 percent of the Ministry of Research, Technology and Higher Education will retire in the next 10 years. Among the largest national ministries, 50 percent of Ministry of Religious Affairs employees will retire in the next 20 years (Table 30). Within the next 10 years, over 50 percent of public school teachers and 3 percent of medical personnel will retire (Table 34). BKN should engage in medium- and long-term planning that takes these forecasts into consideration. It should then work with the line ministries and district governments to ensure that civil servants are hired according to a rigorous selection process and restrict the hiring of medical and teaching staff to graduates of licensed and accredited institutions. BKN should also start a recruitment drive that targets aspiring female civil servants graduating from top universities throughout the country.

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Tables

TABLE 1 Echelon Size across Ranks

Echelon rank	Number of civil servants	% of civil servants
Echelon 1A	240	0.01
Echelon 1B	46	0
Echelon 2A	2,903	0.07
Echelon 2B	6,495	0.15
Echelon 3A	29,584	0.67
Echelon 3B	22,562	0.51
Echelon 4A	148,750	3.39
Echelon 4B	37,365	0.85
Echelon 5A	5,537	0.13
Echelon 5B	197	0
No echelon	4,135,923	94.22

TABLE 2 National Departments with Highest Proportion of Women

Department	Proportion women
Indonesian National Army Headquarters	0.83
National Agency of Drug and Food Control	0.72
Ministry of Health	0.61
Ministry of Women Empowerment and Child Protection	0.60
Indonesian National Police	0.54
Government of Aceh	0.54
National Anti-Narcotics Agency	0.53
Indonesian Financial Transaction Report and Analysis Center	0.53
National Library of the Republic of Indonesia	0.52
Ministry of Religious Affairs	0.50
Ministry of Defense	0.49
Indonesian Creative Economy Agency	0.49
Capital Investment Coordinating Board	0.48
Secretariat General of the National Human Rights Commission	0.48
National Standardization Board	0.48
Population and National Family Planning Board	0.47
National Board for Placement and Protection of Indonesia Overseas Workers	0.47
National Archives of the Republic of Indonesia	0.46
Special Region of Yogyakarta	0.46
Secretariat General of the Judicial Commission	0.46
Ministry of Social Affairs	0.46

TABLE 3 National Departments with Lowest Proportion of Women

Department	Proportion women
Secretariat General of National Security Council	0.28
National Institute of Aeronautics and Space	0.28
Ministry of Energy and Mineral Resources	0.28
National Nuclear Energy Agency	0.27
Indonesia Maritime Security Agency	0.27
Ministry of Public Works and Housing	0.27
Ministry of Environment and Forestry	0.27
Agency of Technology Assessment and Application	0.26
Ministry of Law and Human Rights	0.26
Ministry of Finance	0.26
Coordinating Ministry of Maritime Affairs	0.25
State-Owned Enterprise	0.24
Ministry of Transportation	0.21
Ministry of Environment and Forestry	0.20
Batam Indonesia Free Zone Authority	0.20
Secretariat General of Corruption Eradication Commission	0.16
National Search and Rescue Agency	0.16
State Civil Apparatus Commission	0.13
Secretariat General of Commission for the Supervision of Business Competition	0
Regional-Owned Enterprise	0

TABLE 4 Subnational Departments with Highest Proportion of Women

Department	Proportion women
Government of Ambon City	0.71
Government of Pekanbaru City	0.70
Government of Palembang City	0.70
Government of Padang City	0.69
Government of Minahasa	0.69
Government of Padang Pariaman Subdistrict	0.69
Government of Deli Serdang Subdistrict	0.68
Government of Agam Subdistrict	0.68
Government of Tanah Datar Subdistrict	0.67
Government of Minahasa Utara Subdistrict	0.67
Government of Siau Tagulandang Biaro Subdistrict	0.67
Government of Jambi City	0.67
Government of Medan City	0.67
Government of Gorontalo City	0.66
Government of Pontianak City	0.66
Government of Limapuluh Kota Subdistrict	0.66
Government of Aceh Besar Subdistrict	0.66
Government of Bandar Lampung City	0.66
Government of Batubara Subdistrict	0.66
Government of Simalungun Subdistrict	0.66

TABLE 5 Subnational Departments with Lowest Proportion Women

Department	Proportion women
Government of Asmat Subdistrict	0.34
Government of Yalimo Subdistrict	0.32
Government of Deiyai Subdistrict	0.32
Government of Nduga Subdistrict	0.32
Government of Dogiyai Subdistrict	0.31
Government of Sumenep Subdistrict	0.31
Government of Nias Utara Subdistrict	0.31
Government of Lombok Utara Subdistrict	0.31
Government of Mamberamo Raya Subdistrict	0.30
Government of Mamberamo Tengah Subdistrict	0.30
Government of Paniai Subdistrict	0.29
Government of Manokwari Selatan Subdistrict	0.28
Government of Intan Jaya Subdistrict	0.28
Government of Pegunungan Bintang Subdistrict	0.28
Government of Lanny Jaya Subdistrict	0.26
Government of Puncak Jaya Subdistrict	0.26
Government of Puncak Subdistrict	0.25
Government of Tolikara Subdistrict	0.23
Government of Yahukimo Subdistrict	0.23
Government of Pegunungan Arfak Subdistrict	0.09

TABLE 6 Subnational Gender Breakdown by Structural versus Functional Categories

Functional employee	Structural employee	Proportion women
0	0	0.51
1	0	0.36
0	1	0.33

TABLE 7 Echelon Summary for National Departments

Echelon	Birthplace diversity	Avg. education (rank)	% Male	Avg. experience
1	7.15	5.71	72.19	28.04
2	8.37	5.87	78.15	28.08
3	9.73	5.67	76.46	24.3
4	10.73	5.45	72.06	21.18
5	9.01	3.71	74.11	21.77

Avg. education is measured on a scale of 1–6 (1 = primary, 2 = junior high, 3 = senior high, 4 = D1/2/3 or associate degree, 5 = D4/S1 or bachelor's degree, 6 = S2/S3 or master's degree or doctorate).

TABLE 8 Echelon Summary for Subnational Departments

Echelon	Birthplace diversity	Avg. education (rank)	% Male	Avg. experience (years)
1	3.31	5.72	90.62	30.81
2	8.96	5.73	86.18	27.79
3	10.04	5.64	79.43	24.07
4	11.11	4.48	63.75	24.36
5	7.23	3.25	58.41	28.81

Avg. education is measured on a scale of 1–6 (1 = primary, 2 = junior high, 3 = senior high, 4 = D1/2/3 or associate degree, 5 = D4/S1 or bachelor's degree, 6 = S2/S3 or master's degree or doctorate).

TABLE 9 Largest National Departments by Education

Department	Avg. education (rank)
Ministry of Religious Affairs	4.33
Ministry of Research, Technology and Higher Education	5.20
Ministry of Finance	4.45
Ministry of Defense	2.98
Ministry of Health	4.37
Ministry of Law and Human Rights	3.45
Supreme Court of the Republic of Indonesia	4.47
Ministry of Transportation	3.44
National Police	3.00
Government of Aceh	4.07
Ministry of Public Works and Housing	3.74
Attorney General's Office	3.87
The Ministry of Agrarian Affairs and Spatial Planning/National Land Agency	3.45
Ministry of Agriculture	3.97
Ministry of Environment and Forestry	3.66
Central Bureau of Statistics	3.75
Ministry of Education and Culture	4.23
Special Region of Yogyakarta	3.57
Ministry of Communication and Information Technology	3.49
Ministry of Marine and Fisheries	4.21

Avg. education is measured on a scale of 1–6 (1 = primary, 2 = junior high, 3 = senior high, 4 = D1/2/3 or associate degree, 5 = D4/S1 or bachelor's degree, 6 = S2/S3 or master's degree or doctorate).

TABLE 10 Largest Government Departments

Department	Number
Ministry of Religious Affairs	232,700
Ministry of Research, Technology and Higher Education	112,777
Government of Jakarta Special Region Province	72,155
Ministry of Finance	69,089
Ministry of Defense	58,500
Government of East Java Province	54,091
Ministry of Health	50,732
Government of Central Java Province	45,134
Ministry of Law and Human Rights	43,056
Government of West Java Province	38,438
Supreme Court of the Republic of Indonesia	30,439
Government of North Sumatra Province	30,011
Ministry of Transportation	26,803
Government of South Sulawesi Province	26,095
State Police	24,381
Government of Aceh Province	23,520
Ministry of Public Works and Housing	22,723
Attorney General's Office	21,607
Government of West Sumatra Province	21,195
Ministry of Agrarian Affairs and Spatial Planning	20,019

TABLE 11 Smallest Government Departments by Education

Department	Avg. education
Registrar Office and Secretariat General of the Constitutional Court of the Republic of Indonesia	5.76
Policy Institution for Procurement of Government Goods/Services	5.91
Indonesian Financial Transaction Report and Analysis Center	5.84
Ministry of State-Owned Enterprises	5.04
Coordinating Ministry of Political, Legal and Security Affairs	3.87
Secretariat General of National Human Rights Commission	5.27
Secretariat General of Judicial Commission	5.47
Ombudsman of the Republic of Indonesia	5.60
Coordinating Ministry of Maritime Affairs	5.75
Secretariat General of the Corruption Eradication Commission	6
National Agency for Combating Terrorism	5.86
Secretariat General of National Security Council	3.49
Indonesian Creative Economy Agency	6
State Civil Apparatus Commission	5.37
State-Owned Enterprise	3.20
Ministry of Environment and Forestry	6
Regional-Owned Enterprise	4.50
Secretariat General of Commission for the Supervision of Business Competition	6
Ministry of Public Works and Housing	6

Avg. education is measured on a scale of 1–6 (1 = primary, 2 = junior high, 3 = senior high, 4 = D1/2/3 or associate degree, 5 = D4/S1 or bachelor's degree, 6 = S2/S3 or master's degree or doctorate).

TABLE 12 Smallest Government Departments

Department	Number of civil servants
National Office for Procurement Policy	212
Indonesia Financial Transaction Report and Analysis Center	210
Ministry of State-Owned Enterprises	210
Coordinating Ministry of Political, Legal and Security Affairs	205
Secretariat General of Human Rights Commission	203
Secretariat General of Judicial Commission	198
Ombudsman of the Republic of Indonesia	125
Coordinating Ministry of Maritime Affairs	123
Secretariat of Corruption Eradication Commission	86
National Agency for Combating Terrorism	81
Secretariat General of National Security Council	71
Indonesian Creative Economy Agency	39
State Civil Apparatus Commission	32
State-Owned Enterprise	25
Indonesian National Army Headquarters	13
Ministry of Environment and Forestry	5
Regional-Owned Enterprise	5
Secretariat General of Commission for the Supervision of Business Competition	4
Ministry of Public Works and Housing	2

TABLE 13 Echelon Summary across All Departments

Echelon	Birthplace diversity	Avg. education	Male	Avg. experience
1	7.058	5.713	72.40%	28.06
2	9.948	5.761	83.70%	27.72
3	11.346	5.645	78.50%	24.28
4/5	12.531	4.627	65.10%	20.59

Avg. education is measured on a scale of 1–6 (1 = primary, 2 = junior high, 3 = senior high, 4 = D1/2/3 or associate degree, 5 = D4/S1 or bachelor's degree, 6 = S2/S3 or master's degree or doctorate).

TABLE 14 Most Popular Jobs at National Level

Job	Percentage in data
Teacher	26.43
Implementer	3.62
Expert assistant	3.08
General function	3.03
Lecturer	2.61
Staff	1.70
Head lecturer	1.39
Midlevel expert assistant	1.18
General administrator	1.07
Young lecturer	1.05

TABLE 15 Most Popular Jobs at Subnational Level

Job	Percentage in data
Teacher	63.87
Staff	3.76
Implementer	1.88
General function	1.82
Nurse practitioner	1.66
Advanced nurse practitioner	0.82
Midwife practitioner	0.75
Technical/other administration	0.60
General administration	0.52
Secretary	0.47

TABLE 16 Departments with Most Civil Servants Aged 20–30

Department	Number
Ministry of Finance	23,815
Ministry of Law and Human Rights	10,956
Ministry of Health	6,075
Ministry of Research, Technology and Higher Education	4,815
Central Bureau of Statistics	4,270
Ministry of Home Affairs	4,173
Ministry of Transportation	3,975
Attorney General's Office	3,863
Government of Jakarta Special Region Province	3,575
Ministry of Religious Affairs	2,972
Ministry of Agrarian and Spatial Planning/ National Land Agency	2,808
Supreme Court of the Republic of Indonesia	2,453
Meteorological Climatological and Geophysics Agency	1,900
National Government Internal Audit Agency	1,731
Ministry of Environment and Forestry	1,629
Ministry of Defense	1,613
Audit Board of the Republic of Indonesia	1,528
Ministry of Public Works and Housing	1,514
Government of East Java Province	1,451

TABLE 17 Departments with Most Civil Servants Aged 51–60

Department	Number
Ministry of Religious Affairs	42,101
Ministry of Research, Technology and Higher Education	38,834
Government of Jakarta Special Region Province	33,736
Government of East Java Province	21,117
Government of Central Java Province	17,924
Ministry of Defense	17,777
Government of West Java Province	15,377
Ministry of Health	12,551
Ministry of Finance	10,754
Government of North Sumatra Province	9,957
Supreme Court of the Republic of Indonesia	9,755
Government of Bandung Subdistrict	9,598
Government of South Sulawesi Province	8,611
Ministry of Law and Human Rights	8,409
Government of Bandung City	8,312
Government of West Sumatra Province	8,068
Government of Garut Subdistrict	7,794
Ministry of Agrarian Affairs and Spatial Planning	7,725
Government of Malang Subdistrict	7,636
Government of Jember Subdistrict	7,610

TABLE 18 Departments with Most Civil Servants Aged 60+

Department	Number
Ministry of Research, Technology and Higher Education	6,272
Supreme Court of the Republic of Indonesia	998
Ministry of Religious Affairs	771
Ministry of Health	533
Ministry of Agriculture	171
Indonesian Institute of Sciences	99
Attorney General's Office	99
Ministry of Transportation	97
Ministry of Industry	96
Ministry of Home Affairs	73
Government of East Java Province	68
Agency of Technology Assessment and Application	66
Ministry of Energy and Mineral Resources	55
Ministry of Marine and Fisheries	52
Ministry of Education and Culture	45
Ministry of Public Works and Housing	39
National Nuclear Energy Agency	36
Ministry of Environment and Forestry	24
State Administrative Institution	23
Government of Central Java Province	18

TABLE 19 Retirements by Gender, Functional and Structural Categories, and Echelon (percentage)

Type	Retire in 5 years	Retire in 10 years	Retire in 15 years	Retire in 20 years
Total retirements	0.03	6.41	22.00	39.47
F	0.02	4.08	15.60	29.78
M	0.04	7.77	25.74	45.12
Functional	0.01	6.36	21.96	39.42
Structural	11.42	30.80	44.98	65.05
Echelon 1 & 2	50.80	80.10	91.80	96.10

TABLE 20 Largest National Departments by Birthplace Diversity

Department	Birthplace diversity
Ministry of Religious Affairs	12.12
Ministry of Research, Technology, and Higher Education	11.38
Ministry of Finance	11.03
Ministry of Defense	10.58
Ministry of Health	10.44
Ministry of Law and Human Rights	10.30
Supreme Court of the Republic of Indonesia	10.09
Ministry of Transportation	9.95
National Police	9.77
Government of Aceh	9.70
Ministry of Public Works and Housing	9.69
Attorney General's Office	9.62
The Ministry of Agrarian Affairs and Spatial Planning/National Land Agency	9.55
Ministry of Agriculture	9.54
Ministry of Environment and Forestry	9.43
Central Bureau of Statistics	9.42
Ministry of Education and Culture	9.40
Special Region of Yogyakarta	9.28
Ministry of Communication and Information Technology	9.01
Ministry of Marine and Fisheries	8.79
Ministry of Home Affairs	8.78
Audit Board of the Republic of Indonesia	8.62
National Government Internal Audit Agency	8.50
Ministry of Energy and Mineral Resources	8.47
Secretariat General of General Election Commission	8.32

TABLE 21 Smallest National Departments by Birthplace Diversity

Department	Birthplace diversity
National Resilience Institute of the Republic of Indonesia	5.63
State Apparatus Empowerment and Bureaucratic Reform Ministry	5.58
Secretariat General of People's Consultative Assembly	5.51
Maritime Security Agency of the Republic of Indonesia	5.51
Ministry of Women Empowerment and Child Protection	5.48
Registrar Office and Secretariat General of the Constitutional Court of the Republic of Indonesia	5.30
Policy Institution for Procurement of Government Goods/Services	5.30
Indonesian Financial Transaction Reporting and Analysis Center	5.28
Ministry of State-Owned Enterprises	5.25
Coordinating Ministry of Political, Legal, and Security Affairs	5.20
Secretariat General of the Human Rights National Commission	5.16
Secretariat General of Judicial Commission	4.85
Ombudsman of the Republic of Indonesia	4.63
Coordinating Ministry for Maritime Affairs	4.62
Secretariat General of the Corruption Eradication Commission	4.38
National Agency for Combating Terrorism	4.28
Secretariat General of the National Security Council	4.04
Indonesian Creative Economy Agency	3.79
State Civil Apparatus Commission	3.46
State-Owned Enterprise	3.29
Indonesian National Army Headquarters	1.64
Ministry of Environment and Forestry	1.60
Regional-Owned Enterprises	1.24
Secretariat General of Commission for the Supervision of Business Competition	0.69
Ministry of Public Works and Housing	0.59

TABLE 22 Departments by Proportion Who Work in the Province of their Birth

Department	Proportion who work where they were born
Government of Aceh	0.89
Ministry of Religious Affairs	0.81
Indonesian National Army Headquarters	0.77
Secretariat General of General Election Commission	0.75
National Police	0.69
Ministry of Research, Technology and Higher Education	0.66
Ministry of Law of Human Rights	0.66
The Ministry of Agrarian Affairs and Spatial Planning/National Land Agency	0.62
Central Bureau of Statistics	0.61
National Search and Rescue Agency	0.61
Ministry of Defense	0.61
Ministry of Health	0.60
Supreme Court of the Republic of Indonesia	0.58
Ministry of Public Works and Housing	0.58
National Population and Family Planning Board	0.57
State-Owned Enterprise	0.56
Attorney General's Office	0.54
Ministry of Education and Culture	0.54
National Anti-Narcotics Agency	0.54
Ministry of Communication and Information Technology	0.53

TABLE 23 National Departments by Average Number of Rotations

Department	Avg. rotations
Ministry of Law and Human Rights	0.28
Supreme Court of the Republic of Indonesia	0.17
Audit Board of the Republic of Indonesia	0.17
National Board for Placement and Protection of Indonesian Overseas Workers	0.14
National Government Internal Audit Agency	0.13
Attorney General's Office	0.12
Central Bureau of Statistics	0.12
Ministry of Agriculture	0.12
National Agency of Food and Drug Control	0.12
Ministry of Religious Affairs	0.12
Ministry of Environment and Forestry	0.12
Registrar Office and Secretariat General of the Constitutional Court of the Republic of Indonesia	0.12
Ministry of Finance	0.11
Ministry of Manpower	0.11
National Institute of Aeronautics and Space	0.10
The Ministry of Agrarian Affairs and Spatial Planning / National Land Agency	0.10
Meteorology, Climatology and Geophysics Agency	0.10
National Anti-Narcotics Agency	0.09
Ministry of Communication and Information Technology	0.09
Ministry of Research, Technology and Higher Education	0.08
Indonesian Institute of Sciences	0.08
National Nuclear Energy Agency	0.07
Secretariat General of the General Election Commission	0.07
Ministry of Marine and Fisheries	0.07
Ministry of Tourism	0.06

TABLE 24 Promotion Analysis: Education

	Promotion	Promotion	Promotion	Promotion	Promotion	Promotion
Post Democratization	0	0	0	0	0	0
Education: junior high	0.003*** –0.0004	0	0	0.002*** –0.0004	0	0
Education: senior high	0.01*** –0.0002	0	0	0.004*** –0.0002	0	0
Education: diploma I/II/III	0.01*** –0.0002	0	0	0.005*** –0.0002	0	0
Education: diploma IV/S1	0.01*** –0.0002	0	0	0.01*** –0.0002	0	0
Education: postgraduate	0.04*** –0.0005	0	0	0.03*** –0.001	0	0
Female	–0.01*** –0.0001	0	0	–0.01*** –0.0001	0	0
Age	0.001*** 0	0	0	0.001*** 0	0	0
Protestant	–0.003*** –0.0002	0	0	–0.003*** –0.0002	0	0
Catholic	–0.004*** –0.0002	0	0	–0.003*** –0.0003	0	0
Buddhist	–0.001 –0.002	0	0	0.0001 –0.003	0	0
Hindu	–0.003*** –0.001	0	0	–0.001* –0.001	0	0
Confucian	–0.02*** –0.01	0	0	–0.02*** –0.01	0	0
Other	–0.002 –0.004	0	0	–0.003 –0.004	0	0
Years in civil service	–0.001*** 0	0	0	–0.001*** 0	0	0
Education: junior high*post democratization	0.0003 –0.0003	0.001*** –0.0003	0.001*** –0.0003	0.002*** –0.0003	0.001*** –0.0003	0.001*** –0.0003
Education: Senior High*post Democratization	0.01*** –0.0002	0.01*** –0.0002	0.01*** –0.0002	0.01*** –0.0002	0.01*** –0.0002	0.01*** –0.0002
Education: diploma I/II/III*post democratization	0.01*** –0.0002	0.002*** –0.0001	0.002*** –0.0001	0.002*** –0.0002	0.002*** –0.0001	0.002*** –0.0001
Education: diploma IV/S1*post democratization	0.02*** –0.0002	0.01*** –0.0001	0.01*** –0.0001	0.01*** –0.0002	0.01*** –0.0001	0.01*** –0.0001

The second number in the regression table refers to the standard error.

TABLE 24 Promotion Analysis: Education *continued*

	Promotion	Promotion	Promotion	Promotion	Promotion	Promotion
Education: postgraduate*post democratization	0.03*** –0.0004	0.03*** –0.0004	0.03*** –0.0004	0.03*** –0.0004	0.03*** –0.0004	0.03*** –0.0004
Sample	Full	Full	Full	Pre-1999	Pre-1999	Pre-1999
Department fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Province of birth fixed effects	Yes	No	No	Yes	No	No
Individual fixed effects	No	Yes	Yes	No	Yes	Yes
Golongan fixed effects	No	No	Yes	No	No	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
N	51,674,834	51,674,834	51,674,834	30,130,880	30,130,880	30,130,880
R2	0.03	0.2	0.2	0.03	0.18	0.18
Adjusted R2	0.03	0.14	0.14	0.03	0.15	0.15
Residual standard error	0.12 (df = 51674125)	0.11 (df = 48153553)	0.11 (df = 48153537)	0.11 (df = 30130174)	0.10 (df = 29137554)	0.10 (df = 29137538)

The second number in the regression table refers to the standard error.
* p 0.05.
** p 0.01.
*** p 0.001.

TABLE 25 Promotion Analysis: Gender

	Promotion	Promotion	Promotion	Promotion	Promotion	Promotion
Post democratization	0	0	0	0	0	0
Female	–0.002*** –0.0001	0	0	–0.002*** –0.0001	0	0
Age	0.001*** 0	0	0	0.001*** 0	0	0
Education: junior high	0.002*** –0.0003	0	0	0.002*** –0.0004	0	0
Education: senior high	0.01*** –0.0002	0	0	0.01*** –0.0002	0	0
Education: diploma I/II/III	0.01*** –0.0002	0	0	0.01*** –0.0002	0	0
Education: diploma IV/S1	0.03*** –0.0002	0	0	0.02*** –0.0002	0	0
Education: Postgraduate	0.06*** –0.0003	0	0	0.05*** –0.0005	0	0

(table continues on next page)

TABLE 25 Promotion Analysis: Gender *continued*

	Promotion	Promotion	Promotion	Promotion	Promotion	Promotion
Protestant	−0.003*** −0.0002	0	0	−0.003*** −0.0002	0	0
Catholic	−0.004*** −0.0002	0	0	−0.003*** −0.0003	0	0
Buddhist	−0.001 −0.002	0	0	−0.0001 −0.003	0	0
Hindu	−0.003*** −0.001	0	0	−0.001* −0.001	0	0
Confucian	−0.03*** −0.01	0	0	−0.02*** −0.01	0	0
Other	−0.002 −0.004	0	0	−0.003 −0.004	0	0
Years in civil service	−0.001*** 0	0	0	−0.001*** 0	0	0
Female*Post democratization	−0.01*** −0.0001	−0.01*** −0.0001	−0.01*** −0.0001	−0.01*** −0.0001	−0.01*** −0.0001	−0.01*** −0.0001
Sample	Full	Full	Full	Pre-1999	Pre-1999	Pre-1999
Department fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Province of birth fixed effects	Yes	No	No	Yes	No	No
Individual fixed effects	No	Yes	Yes	No	Yes	Yes
Golongan fixed effects	No	No	Yes	No	No	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
N	51,674,834	51,674,834	51,674,834	30,130,880	30,130,880	30,130,880
R2	0.03	0.2	0.2	0.03	0.18	0.18
Adjusted R2	0.03	0.14	0.14	0.03	0.15	0.15
Residual standard error	0.12 (df = 51674129)	0.11 (df = 48153557)	0.11 (df = 48153541)	0.11 (df = 30130178)	0.10 (df = 29137558)	0.10 (df = 29137542)

The second number in the regression table refers to the standard error.
*p 0.05.
**p 0.01.
***p 0.001.

TABLE 26 Promotion Analysis: Education, Gender, and Religion

	Echelon	Promotion	Echelon	Promotion
Female	−0.24*** −0.004	−0.01*** −0.0002	−0.29*** −0.01	−0.02*** −0.001
Age	0.04*** −0.0004	0.001*** 0	0.08*** −0.001	0.002*** −0.0001
Education: Junior High	0.04** −0.02	0.001 −0.001	0.24*** −0.03	0.01*** −0.002
Education: Senior High	0.29*** −0.02	0.01*** −0.001	0.75*** −0.02	0.04*** −0.002
Education: Diploma I/II/III	0.30*** −0.02	0.01*** −0.001	1.26*** −0.03	0.06*** −0.002
Education: Diploma IV/S1	0.62*** −0.02	0.02*** −0.001	2.12*** −0.02	0.09*** −0.002
Education: Post-Graduate	1.57*** −0.02	0.06*** −0.001	3.34*** −0.03	0.13*** −0.002
Protestant	−0.06*** −0.01	−0.002*** −0.001	−0.09*** −0.02	−0.002 −0.002
Catholic	−0.08*** −0.01	−0.003*** −0.001	−0.07** −0.03	−0.002 −0.002
Buddhist	−0.15** −0.06	−0.01*** −0.003	−0.23 −0.17	−0.03*** −0.01
Hindu	−0.02 −0.03	0 −0.002	0.03 −0.07	0.005 −0.01
Confucius	−0.1 −0.7	−0.04*** −0.01	0.08 −0.87	−0.12*** −0.03
Other	−0.42*** −0.15	−0.02*** −0.01	−0.90** −0.4	−0.04* −0.02
Years in civil service	−0.02*** −0.0003	−0.001*** 0	0.02*** −0.001	0.001*** −0.0001
Sample	Full	Full	Structural	Structural
Department fixed effects	Yes	Yes	Yes	Yes
Province of birth fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
N	4,830,685	4,830,684	1,214,836	1,214,836
R2	0.17	0.02	0.39	0.05
Adjusted R2	0.17	0.02	0.38	0.05
Residual standard error	1.09 (df = 482991)	0.12 (df = 4829980)	1.64 (df = 1214132)	0.23 (df = 1214132)

The second number in the regression table refers to the standard error.
* p 0.05.
** p 0.01.
*** p 0.001.

TABLE 27 Rotation Analysis: Education

	Rotation	Rotation	Rotation	Rotation	Rotation	Rotation
Post Democratization	0	0	0	0	0	0
Education: Junior High	0.002 –0.01	0	0	0.003 –0.01	0	0
Education: Senior High	0.04 *** –0.005	0	0	0.04 *** –0.005	0	0
Education: Diploma I/II/III	0.06 *** –0.005	0	0	0.06 *** –0.005	0	0
Education: Diploma IV/S1	0.05 *** –0.005	0	0	0.05 *** –0.005	0	0
Education: Post-Graduate	0.02 *** –0.01	0	0	0.03 *** –0.01	0	0
Female	0.001 –0.001	0	0	–0.0001 –0.001	0	0
Age	–0.0002 *** –0.0001	0	0	–0.0005 *** –0.0002	0	0
Protestant	–0.0005 –0.001	0	0	–0.001 –0.002	0	0
Catholic	–0.001 –0.002	0	0	–0.002 –0.003	0	0
Buddhist	–0.003 –0.02	0	0	0.03 –0.04	0	0
Hindu	0.01 *** –0.005	0	0	0.01 ** –0.01	0	0
Confucian	–0.03 *** –0.004	0	0	–0.03 *** –0.01	0	0
Other	–0.03 *** –0.01	0	0	–0.06 *** –0.02	0	0
Years in Civil Service	0.001 *** 0	0	0	0.0004 *** –0.0001	0	0
Echelon Level	–0.002 *** –0.0002	–0.001 *** –0.0003	–0.001 *** –0.0003	–0.004 *** –0.0004	–0.002 *** –0.0005	–0.002 *** –0.0005
Education: Junior High*Post Democratization	0.004 –0.01	0.003 –0.005	0.003 –0.005	0.003 –0.01	0.003 –0.005	0.003 –0.005
Education: Senior High*Post Democratization	–0.03 *** –0.01	–0.01 –0.004	–0.01 –0.004	–0.01 –0.01	–0.01 –0.004	–0.01 –0.004
Education: Diploma I/II/III*Post Democratization	–0.04 *** –0.01	–0.02 *** –0.004	–0.02 *** –0.004	–0.02 *** –0.01	–0.02 *** –0.004	–0.02 *** –0.004

TABLE 27 Rotation Analysis: Education *continued*

	Rotation	Rotation	Rotation	Rotation	Rotation	Rotation
Education: Diploma IV/ S1*Post Democratization	−0.03 *** −0.01	−0.01 ** −0.004	−0.01 ** −0.004	−0.01 * −0.01	−0.01 ** −0.004	−0.01 ** −0.004
Education: Post-Graduate*Post Democratization	0.01 −0.01	0.02 *** −0.005	0.02 *** −0.005	0.02 *** −0.01	0.02 *** −0.005	0.02 *** −0.005
Sample	Full	Full	Full	Pre-1999	Pre-1999	Pre-1999
Department fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Province of birth fixed effects	Yes	No	No	Yes	No	No
Individual fixed effects	No	Yes	Yes	No	Yes	Yes
Golongan fixed effects	No	No	Yes	No	No	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
N	4,142,301	4,142,301	4,142,301	2,419,217	2,419,217	2,419,217
R2	0.05	0.34	0.34	0.05	0.29	0.29
Adjusted R2	0.05	0.29	0.29	0.05	0.27	0.27
Residual standard error	0.20 (df = 4141593)	0.18 (df = 3860303)	0.18 (df = 3860287)	0.23 (df = 2418528)	0.20 (df = 2339432)	0.20 (df = 2339417)

The second number in the regression table refers to the standard error.
* p 0.05.
** p 0.01.
*** p 0.001.

TABLE 28 Top Five Most Central Universities

University	Centrality (number of ties)
Information Management and Computer Academy	39
Accounting Academy	39
Nursing Academy	37
Academy of Finance and Banking	37
Corporate Leadership Academy	32

TABLE 29 Rotations by Gender, Education, and Echelon

Echelon	Male	Female	Education level	Male	Female
0	0.06	0.05	1	0	0.01
1	0.04	0.03	2	0.01	0.01
2	0.03	0.02	3	0.05	0.05
3	0.04	0.01	4	0.05	0.05
4	0.02	0.06	5	0.06	0.06
			6	0.08	0.07

TABLE 30 Percent Retiring in 10 Largest National Agencies in the Next 20 Years

Agency	Retire in 5 years	Retire in 10 years	Retire in 15 years	Retire in 20 years
Ministry of Religious Affairs	0.40	6.60	22.70	50.00
Ministry of Research, Technology and Higher Education	7.20	23.90	43.40	59.30
Ministry of Finance	0	7.00	16.50	26.40
Ministry of Defense	0	10.00	36.50	65.40
Ministry of Health	1.30	11.80	29.10	44.70
Ministry of Law and Human Rights	0.00	7.50	22.50	35.70
Supreme Court of the Republic of Indonesia	4.40	19.80	38.60	54.10
Ministry of Transportation	0.50	9.30	21.60	37.10
National Police	0	8.90	31.90	54.10
Ministry of Public Works and Housing	0.20	12.30	34.90	56.90

TABLE 31 Percent Retiring in 10 Smallest National Agencies in the Next 20 Years

Agency	Retire in 5 years	Retire in 10 years	Retire in 15 years	Retire in 20 years
Secretariat General of Judicial Commission	0	4.00	7.60	10.60
Ombudsman of the Republic of Indonesia	0	2.40	8.80	11.20
Coordinating Ministry for Maritime Affairs	0.80	8.10	22.80	46.30
Secretariat General of the Corruption Eradication Commission	0	1.20	3.50	23.30
National Agency for Combating Terrorism	0	1.20	16.00	23.50
Secretariat General of the National Security Council	0	16.90	33.80	52.10
Indonesian Creative Economy Agency	0	15.40	46.20	61.50
State Civil Apparatus Commission	0	3.10	9.40	25.00
Indonesian National Army Headquarters	0	0	15.40	15.40
Secretariat General of the Commission for the Supervision of Business Competition	0	25.00	75.00	100.00

TABLE 32 Retirements in the Next 10 Years

District Name	No. of retirements	% Civil servants retiring
Jakarta Pusat	935	42.31
Bandung	901	12.67
Jakarta Selatan	607	47.31
Padang	568	14.35
Medan	373	22.42
Kupang	339	13.11
Tangerang	287	10.56
Semarang	285	15.36
Pekannbaru	281	13.97
Bogor	279	10.47

TABLE 33 Midwife Retirements

District name	No. of retirements	% Midwives retiring
DKI Jakarta	95	10.12
DI Yogyakarta	9	9.38
West Java	191	2.64
Bali	41	2.52
South Sulawesi	76	2.29
East Kalimantan	26	2.09
Banten	34	2.02
Central Java	158	1.81
North Sumatra	110	1.53
West Sumatra	42	1.47

TABLE 34 Retirements of Teachers and Medical Personnel (percentage)

Occupation	Retire in 5 years	Retire in 10 years	Retire in 15 years	Retire in 20 years
Medical personnel	0.10	3.20	10.80	23.60
Teachers	29.40	54.30	71.40	81.70

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