

# THE RELATIONSHIP OF REGIONAL OWN SOURCE REVENUE AND GENERAL ALLOCATION FUNDS TO CAPITAL EXPENDITURE IN MALUKU PROVINCE: A REGENCY/CITY CASE STUDY

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## Abstract

This research paper explores the dynamic interplay between Regional Own Source Revenue (PAD) and General Allocation Funds (DAU) and their impact on capital expenditure in Maluku Province, Indonesia. The study focuses on a case study approach involving various provincial regencies and cities. It investigates the extent to which PAD and DAU influence the allocation and utilization of resources for capital projects, shedding light on the fiscal management and development priorities at the local level. Through a combination of quantitative analysis and qualitative insights, this study aims to understand better the financial mechanisms that drive infrastructure and development investments in Maluku Province. The findings have significant implications for regional economic growth and policy decisions in Indonesia and offer valuable lessons for other regions facing similar challenges in balancing fiscal resources for sustainable development.

**Keywords:** Regional Economic Growth, Development Investments, Fiscal Management, Policy Decisions, Maluku Province.

## 1. INTRODUCTION

In the current era of fiscal decentralization, there is a desire to develop or increase facilities in various sectors, especially the public sector. This is because there is a growing demand from the community for public services and public goods provided by the government. It will have other effects related to increasing the attractiveness for investors to invest in the region, which will, in turn, drive the development of an area (Diem & Hart, n.d.; Sun et al., 2017). Public service is any effort in the form of general activities carried out by both the central government and local governments, as well as state-owned enterprises in the form of goods and services to meet the needs of the community (Abang'a et al., 2022; Papenfuß & Keppeler, 2020). Furthermore, public services are the needs of the community and organizations that must be served, and there must be an interest in an organization by fundamental rules and procedures aimed at satisfying the service recipients (Diefenbach, 2009).

By considering various opinions on public services, it can be concluded that public service is an activity carried out by the government at the central and local levels to meet the community's needs in the form of goods or services and other relevant law provisions. The public sector in the local government budget, specifically in the context of the Regional Budget (APBD), involves the allocation of resources to produce specific outputs (Andjarwati et al., 2021; Mahdalena et al., 2021; Mutia Edwy et al., 2022). This is a significant issue in public sector

budgeting. It arises due to the shifting composition of expenditures, which is one of the efforts made by local governments to enhance public trust (Gil-Garcia et al., 2014; Guillamón et al., 2011; Lowndes & Pratchett, 2012). With limited resources, local governments must allocate their income to productive regional expenditures (capital expenditures) (Purba et al., 2020; Safitri et al., 2021). Regional expenditures are estimates where the expenditure burden should be allocated fairly to ensure that various segments of society can enjoy it without causing disruptions, especially in the provision of public services (Mules & Dwyer, 2005).

The government allocates a budget at the local level for capital expenditure in the form of the Regional Budget (APBD) to increase fixed assets (Damayanti & Karim, 2021; Hardiningsih et al., 2018). Capital expenditure is a budget that can acquire fixed and other assets that provide benefits over more than one accounting period (Government Regulation No. 24 of 2005). Capital expenditure is allocated according to the region's needs for infrastructure and facilities, both for the smooth operation of the government in performing its duties and for public facilities (Ekpung et al., 2014; Indrawan & Nuraeni Heryanti, n.d.; Liu & Wilkinson, 2014).

Ideally, expenditure benefits should be used for productive purposes, such as fulfilling development activities (Hope, 2009). This is accompanied by the perspective that government revenue should be primarily used for public service projects (AUCOIN, 2012; Dickovick, 2014). On the other hand, in allocating local government funds, priority should be given to higher capital expenditure rather than day-to-day spending, which is relatively less productive (DA CRUZ & MARQUES, 2012; Einstein & Kogan, 2015; GEDDES, 2006). All three opinions indicate the importance of regional expenditure allocation prioritizing the common good or public interest.

Here is the realization of capital expenditure allocation in the Regencies/Cities of Maluku Province for the years 2011-2020, as seen in Table 1.

**Table 1: Realization of Capital Expenditure Allocation in Regencies/Cities of Maluku Province for the Year 2011-2020**

No.	Regencies/ Cities in Maluku Province	Allocation of Capital Expenditure (Rp)									
		Years									
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1	Maluku	116	82	106	145	224	209	176	174	158	228
	Tenggara	905	422	667	940	728	600	474	969	753	769
	Barat	510	172	887	713	255	854	054	642	111	708
2	Maluku Tenggara	110	83	106	107	192	298	251	217	204	225
		407	718	119	197	224	046	943	617	380	765
		627	337	462	438	902	274	822	469	167	423
3	Maluku Tengah	129	109	212	205	332	332	364	345	377	424
		429	991	087	979	245	146	918	096	355	579
		943	000	683	017	278	231	839	716	976	497
4	Buru	116	82	94	97	198	252	141	264	226	293
		241	081	653	787	230	688	619	590	407	238
		605	788	170	322	862	446	176	718	516	420

5	Kepulauan Aru	110	67	56	109	129	238	254	226	161	130
		300	354	008	020	268	445	589	455	209	056
		442	082	314	260	110	816	863	936	394	266
6	Seram Bagian Barat	131	119	125	136	212	200	230	276	222	220
		557	017	516	670	053	568	412	383	617	249
		611	000	028	559	180	637	990	659	864	246
7	Seram Bagian Timur	151	138	165	138	255	220	295	239	177	139
		429	932	534	247	355	812	570	768	887	975
		327	000	955	067	227	460	419	853	499	588
8	Maluku Barat Daya	112	156	135	151	194	271	333	239	255	307
		593	546	332	485	422	196	764	955	804	617
		524	338	610	265	416	696	882	993	453	996
9	Buru Selatan	97	96	133	174	240	286	221	265	172	163
		999	281	664	106	425	940	775	655	907	060
		329	452	485	788	101	405	229	392	414	991
10	Kota Ambon	97	111	105	129	189	195	201	173	178	222
		459	311	037	990	110	522	284	060	939	611
		833	000	354	393	623	478	226	783	317	074
11	Kota Tual	109.7	85	92	114	63	222	162	170	117	122
		84	260	759	459	675	342	166	610	077	882
		612	948	311	314	747	131	819	589	397	004

Source: Central Bureau of Statistics (BPS) Maluku Province (Regencies/Cities) for the Year 2011-2020

Based on Table 1, the allocation of capital expenditure in the Regencies/Cities of Maluku Province has shown fluctuations from 2011 to 2020. In West Southeast Maluku Regency, when compared to the previous years, the highest capital expenditure occurred in 2020, amounting to Rp 228,769,708, while the lowest was in 2012 at Rp 82,422,172. In contrast, in Southeast Maluku Regency, the highest capital expenditure was in 2016, reaching Rp 298,046,274, and the lowest was in 2012 at Rp 83,718,337. Similarly, in Central Maluku Regency, the highest capital expenditure was in 2020 at Rp 424,579,497, and the lowest was in 2012 at Rp 109,991,000. In Buru Regency, the highest capital expenditure was in 2020 at Rp 293,238,420, and the lowest was in 2012 at Rp 82,081,788. In Aru Islands Regency, the highest capital expenditure occurred in 2017, totaling Rp 254,589,863, while the lowest was in 2013 at Rp 56,008,314, which is different from the previous year, 2012.

In West Seram Regency, the highest capital expenditure was in 2018 at Rp 276,383,659, and the lowest was in 2012 at Rp 119,017,000. In East Seram Regency, the highest capital expenditure was in 2017 at Rp 295,570,419, and the lowest was in 2014 at Rp 138,247,067. Meanwhile, in Southwest Maluku Regency, the highest capital expenditure occurred in 2017, amounting to Rp 333,764,882, and the lowest was in 2011 at Rp 112,593,524. In South Buru Regency, the highest capital expenditure was in 2016 at Rp 286,940,405, and the lowest was in 2012 at Rp 96,281,452. In Ambon City, the highest capital expenditure was in 2020 at Rp 222,611,074, and the lowest was in 2011 at Rp 97,459,833. Finally, in Tual City, the highest capital expenditure occurred in 2016, totaling Rp 222,342,131, and the lowest was in 2015 at Rp 63,675,747.

Here is the realization of Regional Own-Source Revenue (PAD) in the Regencies/Cities of Maluku Province for 2011-2020, as seen in Table 2.

**Table 2: Realization of Regional Own-Source Revenue in the Regencies/Cities of Maluku Province for the Year 2011-2020**

No	Regencies/ Cities in Maluku Province	Regional Own-Source Revenue (Rp)									
		Years									
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1	Maluku	9	12	20	22	32	32	27	40	33	32
	Tenggara	173	535	751	189	083	640	383	443	031	142
	Barat	311	671	500	253	213	579	491	614	787	936
2	Maluku	17	14	25	32	45	59	54	55	56	55
	Tenggara	106	012	096	421	545	068	122	136	518	114
		209	253	921	606	690	869	712	773	086	847
3	Maluku	10	12	24	52	65	120	66	59	73	83
	Tengah	927	131	373	677	551	254	857	820	926	302
		906	576	645	744	092	443	675	017	964	557
4	Buru	5	8	10	15	20	21	39	46	28	60
		308	576	835	127	901	257	973	257	040	787
		067	180	824	721	126	160	488	090	096	640
5	Kepulauan	24	7	11	10	21	20	43	59	61	122
	Aru	826	677	363	943	742	171	525	274	322	908
		272	257	642	358	724	837	982	149	057	491
6	Seram	2	4	4	13	28	25	18	23	28	35
	Bagian	419	506	569	413	126	988	864	233	635	680
	Barat	557	424	033	046	452	089	609	152	819	908
7	Seram	8	10	10	11	18	21	20	24	24	23
	Bagian	302	835	951	257	017	548	691	483	095	161
	Timur	082	634	440	097	881	342	995	710	720	146
8	Maluku	6	9	1	17	22	40	49	49	54	119
	Barat	756	271	675	794	462	264	763	399	326	485
	Daya	329	545	432	683	531	113	945	757	738	468
9	Buru	2	3	2	11	12	26	12	15	16	32
	Selatan	521	354	455	075	878	985	855	506	092	285
		268	679	364	939	291	938	910	213	630	295
10	Kota	53	58	66	98	114	127	139	154	162	193
	Ambon	332	252	178	882	626	227	372	973	761	230
		621	562	584	342	808	228	008	388	892	435
11	Kota	7	8	9	16	15	19	32	27	20	30
	Tual	773	444	598	562	436	691	528	232	733	497
		395	824	683	974	821	233	688	882	993	220

Source: Central Bureau of Statistics (BPS) Maluku Province (Regencies/Cities) for the Year 2011-2020

Based on Table 1.2 above, the realization of Regional Own-Source Revenue (PAD) in the Regencies/Cities of Maluku Province for the years 2011-2020 has generally experienced fluctuations, except for Ambon City, which has consistently increased each year from Rp 53,332,621 in 2011 to Rp 193,230,435 in 2020.

In West Southeast Maluku Regency, compared to previous years, the highest Regional Own-Source Revenue occurred in 2018 at Rp 40,443,614, and the lowest was in 2011 at Rp 9,173,311. In contrast, in Southeast Maluku Regency, the highest Regional Own-Source Revenue was in 2016 at Rp 59,068,869, and the lowest was in 2012 at Rp 14,012,253. Similarly, in Central Maluku Regency, the highest Regional Own-Source Revenue occurred in 2016 at Rp 120,254,443, and the lowest was in 2011 at Rp 10,927,906.

In Buru Regency, compared to the previous year, the highest Regional Own-Source Revenue occurred in 2020 at Rp 60,787,640, and the lowest was in 2011 at Rp 5,308,067. In the Aru Islands Regency, the highest Regional Own-Source Revenue was in 2020 at Rp 122,908,491, and the lowest was in 2012 at Rp 7,677,257. Similarly, in West Seram Regency, the highest Regional Own-Source Revenue occurred in 2020 at Rp 35,680,908, and the lowest was in 2011 at Rp 2,419,557. In contrast, in East Seram Regency, when compared to the previous year, the highest Regional Own-Source Revenue occurred in 2018 at Rp 24,483,710, and the lowest was in 2011 at Rp 8,302,082. In Southwest Maluku Regency, the highest Regional Own-Source Revenue occurred in 2020 at Rp 119,485,468, and the lowest was in 2013 at Rp 1,675,432.

Meanwhile, in South Buru Regency, compared to the previous year, the highest Regional Own-Source Revenue occurred in 2020 at Rp 32,285,295, and the lowest was in 2013 at Rp 2,455,364. In contrast, in Tual City, the highest Regional Own-Source Revenue occurred in 2017 at Rp 32,528,688, and the lowest was in 2011 at Rp 7,773,395. In this context, a significant portion of Regional Own-Source Revenue is influenced by other legally recognized sources of income (Lain-lain PAD) from each Regency/City when compared to Local Taxes, Regional Levies, and the Income from Regional-Owned Enterprises and the Management of Separated Regional Wealth. The realization of the General Allocation Fund (DAU) receipts in the Regencies/Cities of Maluku Province from 2011 to 2020 can be seen in Table 3.

**Table 3: Realization of General Allocation Fund Receipts in Regencies/Cities of Maluku Province for the Year 2011-2020**

No	Regencies / Cities in Maluku Province	General Allocation Fund (DAU) (Rp)									
		Years									
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1	Maluku	318	367	412	487	503	563	553	561	578	529
	Tenggara	081	501	152	859	538	464	890	838	241	865
	Barat	653	000	331	601	977	570	033	215	453	897
2	Maluku	253	310	376	399	420	487	677	495	507	518
	Tenggara	489	534	516	953	265	843	209	979	138	044
		233	000	763	093	646	514	753	781	710	766
3	Maluku	548	672	766	848	885	977	960	965	992	1
	Tengah	484	609	730	638	791	608	434	391	833	006
		621	000	637	632	029	288	854	210	340	551
4	Buru	274	329	356	392	426	491	488	500	528	546
		741	533	075	051	257	122	892	117	471	025
		321	510	091	367	952	036	595	604	311	271

5	Kepulauan Aru	302	356	375	465	492	573	568	580	599	628
		931	469	944	211	968	200	754	686	932	789
		395	535	887	478	171	990	649	128	666	193
6	Seram Bagian Barat	323	400	441	488	521	598	589	597	622	640
		491	090	210	603	779	303	772	525	135	197
		814	000	135	424	419	239	789	057	262	979
7	Seram Bagian Timur	260	328	366	436	440	509	506	530	488	563
		346	796	782	637	078	430	923	650	262	830
		027	000	861	414	172	093	288	657	636	967
8	Maluku Barat Daya	302	353	398	480	567	554	550	566	579	535
		240	270	185	498	308	470	740	039	319	779
		011	635	224	537	065	538	605	812	723	323
9	Buru Selatan	221	259	294	360	381	415	413	420	440	453
		884	459	019	928	666	945	834	639	886	993
		331	000	779	033	874	544	980	459	026	573
10	Kota Ambon	411	497	551	601	620	686	642	674	697	706
		137	389	507	627	624	184	850	130	567	048
		994	000	941	489	670	418	942	364	328	782
11	Kota Tual	196	217	265	303	247	383	394	394	405	416
		698	666	698	383	820	259	706	706	140	296
		784	000	683	575	229	624	960	960	954	345

Source: Central Bureau of Statistics (BPS) Maluku Province (Regencies/Cities) for the Year 2011-2020

Based on Table 3, the General Allocation Fund tends to fluctuate from 2011 to 2020. In West Southeast Maluku Regency, the highest General Allocation Fund occurred in 2019, amounting to Rp 578,241,453 compared to previous years. The lowest General Allocation Fund was in 2011, at Rp 318,081,653. In contrast to West Southeast Maluku, the highest General Allocation Fund occurred in 2017, totaling Rp 677,209,753, and the lowest was in 2011 at Rp 253,489,233. However, in Central Maluku Regency, the highest General Allocation Fund occurred in 2020 at Rp 1,006,551,780, a significant increase compared to the previous year, and the lowest was in 2011 at Rp 548,484,621. The same trend applies to Buru Regency, where the General Allocation Fund reached its highest point in 2020 at Rp 546,025,271 and its lowest in 2011 at Rp 274,741,321.

In the Aru Islands Regency, the highest General Allocation Fund occurred in 2020 at Rp 628,789,193, while the lowest was in 2011 at Rp 302,931,395. Meanwhile, in West Seram Regency, compared to previous years, the highest General Allocation Fund occurred in 2020 at Rp 640,197,979, and the lowest was in 2011 at Rp 323,491,814. In East Seram Regency, the highest General Allocation Fund was in 2020 at Rp 563,830,967, with the lowest in 2011 at Rp 260,346,027.

In contrast to Southwest Maluku Regency, the highest General Allocation Fund occurred in 2019 at Rp 579,319,723, and the lowest was in 2011 at Rp 302,240,011. In South Buru Regency, the highest General Allocation Fund was in 2020 at Rp 453,993,573, while the lowest was in 2011 at Rp 221,884,331. Similarly, in Ambon City, compared to previous years, the highest General Allocation Fund was in 2020 at Rp 706,048,782, and the lowest was in 2011

at Rp 411,137,994. In Tual City, the highest General Allocation Fund was in 2020 at Rp 416,296,345, and the lowest was in 2011 at Rp 196,698,784.

Therefore, this research investigates the influence of the Local Revenue and General Allocation Fund on Capital Expenditure in the Regencies and Cities of Maluku Province from 2011 to 2020.

## **2. LITERATURE REVIEW**

### **2.1 Capital Expenditure Theory**

Capital expenditure represents government spending to realize government-owned rights related to specific fixed assets (Firmansyah et al., 2022). This is sourced from PSAP No.02, where fixed assets are those assets that can provide benefits over multiple periods through budgeted expenditures on capital outlays.

Article 26 of Government Regulation No. 58 of 2005 regarding regional financial management, specifically in its fourth section, stipulates the following: Paragraph 1 states, "Regional expenditures can be used to carry out government affairs falling under the authority of provinces/cities, consisting of mandatory and optional matters, as specified by legislation." Subsequently, Paragraph 2 reads, "Expenditure for the implementation of mandatory affairs referred to in Paragraph 1 is prioritized to protect the community, ensuring the fulfillment of regional obligations manifested in the improvement of basic services, education, health, social facilities, and public facilities within a viable social security system."

However, in practice, it is observed that budget proposals made by the executive branch tend to prioritize executive interests, as noted by Smith and Bertozzi in 1998. The executive branch allocates budgets that can enhance its agency, both financially and non-financially. Capital Expenditure is calculated by summing up various components, including Land Expenditure, Equipment and machinery Expenditure, Building and construction Expenditure, Road, Irrigation, Network Expenditure, and Other Asset Expenditure. These components represent the overall capital expenditure for a given period.

### **2.2 Local Own-source Revenue (PAD) Theory**

Local Own-source Revenue, or Original Local Government Revenue (*PAD*) in Indonesia, refers to the income received by local governments due to their activities and services to the community. This income is derived from resources that provide benefits to the local government. It serves as an indicator often used to gauge the level of progress in a region. A region is considered advanced when it has a high level of Local Own-source Revenue. With increased Local Own-source Revenue, local governments have reduced dependence on the central government for funding the Regional Budget (APBD). In summary, Local Own-source Revenue is a critical financial metric for local governments. Its growth signifies a region's economic development and ability to fund its programs and services, diminishing the reliance on central government funding.

Local Own-source Revenue can also be understood in Law No. 33 of 2004, specifically Article 3, Paragraph 1, which pertains to financial balance (Afif Rahula et al., 2020; Putral et al., 2023). It states that the purpose of local own-source revenue is to empower regional governments to fund the implementation of regional autonomy in line with the region's potential as a manifestation of decentralization. Consequently, the region's primary revenue source is local own-source revenue. In this context, local governments can execute planned development, ensuring that the outcomes benefit the entire local population. This implies that if local own-source revenue increases, it can positively impact the pace of development in that region. More significant local own-source revenue can lead to accelerated development, which benefits the local community.

Local Own-source Revenue is the sum of various components, including Income from local taxes, Revenue from local retributions, Income generated from regional-owned enterprises or the management of separated regional assets, and Other legitimate sources of Local Own-source Revenue. These components comprise the Local Own-source Revenue, which is essential for funding various regional or local government activities and services.

### 2.3 The General Allocation Fund

The General Allocation Fund (Dana et al.) is one of the funds allocated by the National Budget (APBN) in a manner that aims to promote financial equalization among regions. The calculation and distribution of the General Allocation Fund are governed by specific provisions, including **Minimum Allocation**: The General Allocation Fund should be set in the National Budget (APBN) for at least 25% of the total amount received by regions (nations), **Provincial and District/City Allocation**: Provinces and districts/cities each receive a portion of the General Allocation Fund, with provinces receiving 10% and districts/cities receiving 90% of the fund as determined above, **Calculation for Districts/Cities**: The allocation for districts/cities is calculated based on the provisions in the National Budget (APBN) with a share for the respective district or city. In this context, the term "share" refers to the proportionate weight according to the districts/cities across Indonesia. These regulations are designed to ensure that financial resources are distributed in a manner that contributes to financial equalization among regions, helping to address disparities in economic development and public services.

The General Allocation Fund (*Dana et al.*), as outlined in the concept of Law No. 25 of 1999, is implicitly associated with the theory of governmental transfers based on the fiscal gap concept. In this context, fiscal gap refers to the negative difference between fiscal needs and capacity. The fiscal capacity represents a region's or local government's ability to generate revenue and fund expenditures. When the fiscal gap exists, and a region's fiscal capacity is insufficient to cover its fiscal needs, it necessitates transfers from the central government to bridge this gap. The General Allocation Fund, among other mechanisms, serves as a means for the central government to transfer financial resources to regional or local governments to address these fiscal gaps. This concept aligns with fiscal equalization and financial stability principles, ensuring that regions with limited fiscal capacity receive support from the central government to fulfill their financial needs and deliver public services effectively.



A General Allocation Fund (DAU) that is transferred is a fund that can be categorized as general assistance. This can be seen from the situation and financial conditions (Latif et al., 2022; Wirandana & Khoirunurrofik, n.d.). Consequently, the government is compelled to allocate the General Allocation Fund (DAU) to pay salaries. However, this can also be included in unconditional general assistance (block grants) transfers.

The central government assists local governments through grants with various objectives, including promoting geographical equity, ensuring fair resource distribution among different regions, enhancing accountability, thus promoting increased transparency and responsible fund management, advancing a more progressive tax system, and increasing local tax revenues. Local governments may subsidize some of their expenses to reduce local taxes.

The General Allocation Fund is an effort to achieve equality and fairness in implementing decentralization, sourced from the national revenue provided by the central government to local governments (Awwaliyah et al., 2019). This can be interpreted as the General Allocation Fund being used for regional equity. It is expected that this fund will enable the delivery of adequate services in line with the community's needs based on the regulations set by the central government.

From the definitions and objectives mentioned above, we can conclude that the General Allocation Fund (DAU) is a source of funding from the National Budget (APBN), allocated to provincial and district/city governments to equalize finances and needs among regions for decentralization implementation. The goal is to reduce regional disparities by considering the needs and potential of each area. The General Allocation Fund is distributed by transferring funds from the State General Treasury to the Regional General Treasury. This distribution occurs monthly, with each region receiving half of its allocated General Allocation Fund, regulated by the Indonesian Ministry of Finance.

### **3. RESEARCH METHODS**

Based on the previous background, this research is located in the Maluku Province, encompassing two cities and nine districts. The data for this study is quantitative and can be quantified in terms of numbers. About the previous budget that will be examined, quantitative data in the form of Regional Budget (RAPBD) for the years 2011-2020 for two cities and nine districts in the Maluku Province is required, particularly data including Local Revenue (PAD), General Allocation Fund (DAU), and Capital Expenditure as quantitative data for this research. The research data is secondary data obtained from the RAPBD of cities and districts in the Maluku Province, directly sourced from the Central Statistics Agency (*Badan et al.*) of the Maluku Province and the official website of the Central Statistics Agency of Maluku (Maluku.bps.go.id).

Based on the previous discussion, the research methodology employed is quantitative, utilizing two independent variables, namely PAD (X1) and DAU (X2), and one dependent variable, Capital Expenditure (Y). As explained earlier, the research objects used include PAD and DAU as independent variables and Capital Expenditure as the dependent variable in cities and

districts in the Maluku Province for the years 2011-2020. The population used in this study comprises all the regions in the Maluku Province, which are divided into two cities and nine districts. Since the research population consists of all cities and districts in the Maluku Province, the sampling method used is a saturated sampling method, where all population members are required for the research sample. Therefore, all districts and cities in the Maluku Province are included in this research sample.

The data testing technique involves the Model Determination Test, and the data analysis technique used is the panel data regression model to examine the influence of the independent variables PAD and DAU on the dependent variable Capital Expenditure.

#### 4. RESULTS AND DISCUSSION

A model selection test should be conducted before a panel data regression model is used to test hypotheses. A description of the research variables based on the data obtained through data collection methods can be found in Table 4.

**Table 4: The results of the Chow test**

Redundant Fixed Effects Tests			
Pool: DATA			
Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	7.327693	(10,97)	0.0000
Cross-section Chi-square	61.898664	10	0.0000

Source: Eviews 10 Data Analysis Results

Based on Table 4, the results of the Chow test show that the Cross-Section Chi-square probability value is 0.0000, which is smaller than the alpha value ( $\alpha = 0.05$ ). This indicates that the Fixed Effect Model (FEM) is a better choice compared to the Common Effect Model (CEM).

**Table 5: The results of the Hausman test**

Correlated Random Effects - Hausman Test			
Pool: DATA			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	24.538033	2	0.0000

Source: Eviews 10 Data Analysis Results

Based on Table 5, the results of the Hausman test indicate that the Cross-Section Random probability value is 0.0000, which is smaller than the alpha value ( $\alpha = 0.05$ ). This means that the Fixed Effect Model (FEM) is a better choice compared to the Random Effect Model (REM).

#### Panel Data Regression Model (Fixed Effect Model (FEM))

Based on the Panel Data Regression Estimation results, as indicated by the Chow test and Hausman test, it has been determined that the best model to use is the Fixed Effect Model

(FEM). The results of the analysis using the Fixed Effect Model (FEM) for this research can be found in Table 6.

**Table 6: Results of Panel Data Regression Estimation using the Fixed Effect Model (FEM) method**

Dependent Variable: BM?				
Method: Pooled Least Squares				
Date: 10/12/22 Time: 06:17				
Sample: 2011 2020				
Included observations: 10				
Cross-sections included: 11				
Total pool (balanced) observations: 110				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-52,039.953	24276589	-2.143627	0.0346
PAD?	0.412669	0.248986	1.657399	0.1007
DAU?	0.441114	0.059462	7.418442	0.0000
Fixed Effects (Cross)				
MTB—C	-11,370.400			
MALRA—C	18,529.474			
MALTENG—C	-68,555.608			
BURU—C	27,038.372			
ARU—C	-39,713.298			
SBB—C	1,493770.			
SBT—C	41,747.884			
MBD—C	36,983.850			
BURSEL—C	70,117.562			
_AMBON—C	-1.04E+08			
_TUAL—C	28,087183			
<b>Effects Specification</b>				
Cross-section fixed (dummy variables)				
R-squared	0.712117	Mean dependent var	1.83E+08	
Adjusted R-squared	0.676503	S.D. dependent var	77382605	
S.E. of regression	44012749	Akaike info criterion	38.14845	
Sum squared resid	1.88E+17	Schwarz criterion	38.46760	
Log-likelihood	-2085.165	Hannan-Quinn criteria.	38.27790	
F-statistic	19.99523	Durbin-Watson stat	1.680321	
Prob(F-statistic)	0.000000			

Source: Eviews 10 Data Analysis Results.

Based on Table 6, the regression results, can be formulated into the following equation:  $Y_{it} = -52,039.953 + 0,412669PAD_{it} + 0,441114DAU_{it} + e_{it}$

### Partial T-Test

Based on Table 6, it can be observed that the coefficient for the Variable of Regional Original Revenue (PAD) is 0.412669, with a probability value of 0.1007, which is greater than  $\alpha = 0.05$ . This implies that H0 is accepted and H1 is rejected. In other words, there is no significant influence of Regional Original Revenue on Capital Expenditure in the Districts/Cities of

Maluku Province for 2011-2020, assuming the General Allocation Fund (DAU) remains constant.

On the other hand, the Variable of General Allocation Fund (DAU) has a coefficient of 0.441114 and a probability value of 0.0000, which is less than  $\alpha = 0.05$ . This means that H0 is rejected, and H1 is accepted. In other words, the General Allocation Fund significantly and positively impacts Capital Expenditure in the Districts/Cities of Maluku Province for 2011-2020, assuming Regional Original Revenue (PAD) remains constant.

### **Simultaneous F-Test**

Based on Table 6, in the Fixed Effect Model (FEM) method, it can be observed that the F-statistic has a value of 19.99523 with a probability value of 0.000000, which is smaller than  $\alpha = 0.05$ . This implies that H0 is rejected, and H1 is accepted. In other words, both variables, Regional Original Revenue (PAD) and General Allocation Fund (DAU), have a significant and positive simultaneous impact on Capital Expenditure (Y) in the Districts/Cities of Maluku Province for the period 2011-2020.

### **Coefficient of Determination (R-squared)**

The Coefficient of Determination (R-squared) is used to examine the relationship between independent variables and the dependent variable. In its application, it can be measured using R-Square, which explains how much the contribution of independent variables to the dependent variable is and has a value within the interval from 0 to 1. The closer the value is to 1, the better the regression results. Based on Table 6 above, it can be observed that the R-Square value is 0.712117. This means that 71.21% of the variation in Capital Expenditure can be explained by the Regional Original Revenue and General Allocation Fund variables. The remaining 28.79% is explained by other variables not included in the research model.

### **Discussions**

Based on the estimation results in this research, we can provide an analysis and discussion regarding the Influence of Regional Original Revenue and General Allocation Fund on Capital Expenditure in the Districts/Cities of Maluku Province for 2011-2020, which can be explained as follows.

#### **a. Analysis of the Effect of Local Revenue on Capital Expenditure**

Based on the results seen in Table 6, using the Fixed Effect Model (FEM), it shows that, partially, Regional Original Revenue (PAD) does not have a significant influence on Capital Expenditure (Y). This result is contrary to the theory adopted. Regional Original Revenue is a crucial sector with a significant role (Loizou et al., 2019; Marchand et al., 2020). Therefore, through this sector, we can gauge how far a region can finance government activities in regional development. Capital Expenditure depends heavily on the size of Regional Original Revenue (Kurniawan et al., 2023). Thus, if the government wishes to improve public services and enhance the population's well-being, the regional government must increase its Regional Original Revenue (Twizeyimana & Andersson, 2019).

The lack of an effect of Regional Original Revenue on Capital Expenditure is due to Personnel Expenditure and Goods Expenditure (Isyandi & Trihatmoko, 2022; Masduki et al., 2022; Yasin, 2019). Wherein, a significant portion of Regional Original Revenue is used for personnel and goods expenses. By examining the actual expenditure data for Maluku over the past four years, it is known that Capital Expenditure tends to decrease, while Personnel Expenditure and Goods Expenditure tend to increase. Given that the economic growth in Maluku still heavily relies on funds from the national budget, the low realization of Capital Expenditure is a specific concern in driving the future economy of Maluku (Tuasikal et al., 2023).

With this, this research aligns with and is supported by previous research (Cahyaning, 2018; Putu et al., 2017). Their findings suggest that Regional Original Revenue does not partially affect Capital Expenditure.

#### **b. Analysis of the Impact of General Allocation Fund on Capital Expenditure**

Based on the results shown in Table 6, using the Fixed Effect Model (FEM), it is evident that the General Allocation Fund (DAU) has a significant partial influence on Capital Expenditure (Y). This is because the General Allocation Fund is one of the funds allocated by the Central Government through the national budget (APBN) to be provided to local governments for regional development. This is in cases where the Local Own Source Revenue is insufficient to support regional development activities. It is also observed that the General Allocation Fund can enhance a region's self-reliance. This is because local governments can utilize the financial equalization funds of the General Allocation Fund to provide public services, which are realized through Capital Expenditure (Shofian et al., 2017).

The General Allocation Fund is considered a Block Grant. Consequently, its utilization is entrusted to regions based on their specific priorities and the developmental needs of the local community in the context of regional autonomy. It is affirmed that if a substantial amount of the General Allocation Fund is disbursed, it will impact Capital Expenditure, leading to its increase, and vice versa.

This research aligns with and is further substantiated by a previous study (Irwansyah et al., 2022; Saprudin et al., 2023). In this study, the results demonstrate that, in a partial sense, the General Allocation Fund significantly influences Capital Expenditure.

#### **c. Analysis of the Influence of Local Own Source Revenue and General Allocation Fund on Capital Expenditure**

Based on the results obtained from Table 6, using the Fixed Effect Model (FEM), it is evident that both independent variables, Local Own Source Revenue (PAD) and General Allocation Fund (DAU), have a significant simultaneous influence on the Capital Expenditure variable (Y). An increase in Local Own Source Revenue impacts government Capital Expenditure, making the provision of public infrastructure and facilities more effective. In other words, a portion of the Local Own Source Revenue is used for Capital Expenditure, which affects Capital Expenditure positively. The General Allocation Fund also contributes to enhancing the

self-reliance of a region. Local governments can utilize the financial equalization funds from the General Allocation Fund to provide public services, which are realized through Capital Expenditure, as outlined by Solikin (2010). This signifies that the General Allocation Fund is crucial in funding Capital Expenditure.

This research is consistent with and reinforced by a previous study conducted by (Mantik et al., 2022 Rianti et al., 2020 Selly et al., n.d.), which found that Local Own Source Revenue and the General Allocation Fund have a significant simultaneous influence on Capital Expenditure.

## **5. CONCLUSION AND RECOMMENDATIONS**

### **5.1 Conclusions**

Based on the estimated panel data results using the Fixed Effect Model (FEM) for the impact of Regional Original Income (PAD) and General Allocation Fund (DAU) on Capital Expenditure, the following conclusions can be drawn:

- 1) From the Partial T-test, it can be concluded that, individually, Regional Original Income (PAD) does not significantly influence Capital Expenditure (Y). However, the General Allocation Fund (DAU) significantly and positively impacts Capital Expenditure (Y).
- 2) From the Simultaneous F-test, it can be concluded that collectively, both the Regional Original Income (PAD) and General Allocation Fund (DAU) variables have a significant and positive impact on the Capital Expenditure (Y) variable.

### **5.2 Recommendations**

Based on the conclusions above, the following recommendations can be made:

- 1) For the provincial government of Maluku, it is advisable to harness the potential of Regional Original Income sources, utilizing them effectively to improve the quality of public services in the region. In addition to Regional Original Income, the government is encouraged to manage and utilize the General Allocation Fund (DAU) effectively to enhance the quality of public services. Furthermore, both the provincial government and political organizations in Maluku should advocate for the allocation of the General Allocation Fund (DAU) to be determined to benefit the island populations, thus enhancing the welfare of both the people and the province of Maluku.
- 2) For future researchers, it is recommended to expand the scope of the study to include other districts or municipalities, particularly those outside of Maluku Province, and extend the research period for a more comprehensive understanding of the subject.

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