

# FACTORS AFFECTING THE ABILITY TO PREPARE CASH FLOW STATEMENT ACCORDING TO PUBLIC SECTOR ACCOUNTING STANDARDS: STUDY AT PUBLIC ENTITIES UNDER THE MINISTRY OF LABOR AND SOCIAL AFFAIRS

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## **Abstract**

The cash flow statement is an important financial statement that reflects cash flow generated from activities and the situation of using cash. For public entities in Vietnam in general and public entities under the Ministry of Labor - Invalids and Social Affairs in particular, the preparation of cash flow statement has only just begun when applying public sector accounting standards. In this article, the author researches the factors affecting the ability to prepare cash flow statement according to public sector accounting standards at public entities under the Ministry of Labor and Social Affairs and has found 3 influencing factors include: **Current regulations, the capacity of the accountants, and the particularity of the entity**. Based on the research results, the author also makes a number of proposals to improve the ability to prepare cash flow statement according to public sector accounting standards at public entities under the Ministry of Labor - Invalids and Social Affairs.

**Keywords:** Cash flow statement, Ability to prepare cash flow statement

## **1. Problem Statement**

Cash flow is essential for a functioning organization. It allows the entity to pay expenses, liabilities, pay employees and invest in necessary assets. Without adequate cash flow, growth and prosperity cannot be achieved. An entity that prepares and presents financial statements under the accrual basis accounting must prepare a cash flow statement and present it as part of the entity's financial statement system. Cash flow statement is a financial statement that reflects the sources of cash inflows and cash expenditures during the period of an entity according to different activities. In Vietnam, according to Circular No. 107/2017/TT - BTC dated October 10, 2017 of the Ministry of Finance, especially when public sector accounting standards are issued and put implemented, the cash flow statement is elevated to a more important position, which is the mandatory report for public entities. However, preparing cash flow statement for public entities under the Ministry of Labor – Invalids and Social Affairs is still new and has some difficulties, so the research on factors affecting the ability to prepare cash flow statement at public entities under the Ministry of Labor - Invalids and Social Affairs is necessary.

## **2. Overview of the study and theoretical bases**

### ***2.1. Overview of cash flow statement according to public sector accounting standards***

The cash flow statement provides information about cash inflows and outflows during the accounting period. The cash flow statement identifies the sources of cash inflows, the items for which cash was expended during the reporting period, and the cash balance at the reporting date. This also provides general information related to all transactions that affect cash. The cash flow statement is used in conjunction with other financial statements to provide information that allows users to assess changes in net assets and the financial structure of an organization. H.Y. Hung, Monica Chan, Annie Yhi, (1995) pointed out that the cash flow statement shows the components of cash inflows and outflows, making it possible to compare the cash flow efficiency of different entities. The three authors Christopher, Salleh Hassan and MS Narasimhan, have several studies on the benefits of cash flow statements in the countries of

Malaysia, India and New Zealand. In the research of Christopher, Salleh Hassan (1999) "Benefits of cash flow statement: Analysis from evidence in Malaysia", the study clearly shows the usefulness of cash flow statement, which is valued at the same level as the balance sheet.

Cash flow statement in public entities are prepared based on accounting data on cash inflows and outflows associated with activities. Accountants can prepare cash flow statements using the direct method or the indirect method. According to the twenty-seventh paragraph of International Public Sector Accounting Standard No. 2, the cash flow statement can be prepared by the direct or indirect method; accordingly, the content of this report is designed differently for each method, but the main content of the cash flow statement is designed in a columnar form consisting of 3 parts reflecting cash flows from 3 activities: Regular activities, investment activities and financial activities. According to the direct method, the cash flow statement presents cash flows from regular activities according to the total revenue and expenditure of the main types of cash flows of this activity. According to this method, information about total cash inflows and outflows can be obtained from the entity's accounting data. According to the indirect method, net cash flow from regular activities is determined through adjusting the net surplus/deficit from regular activities from the effects of inventory, non-monetary items, etc.

The usefulness of the statement is one of the factors that determine whether the cash flow statement is accepted by public entities or not. Entity will prepare cash flow statement when managers and users find the information provided by the statement useful to them in the decision-making process. However, the ability to understand and use the statement is also an important factor determining the preparation of cash flow statement in public entities.

## ***2.2. Factors affecting the ability to prepare a cash flow statement according to public sector accounting standards***

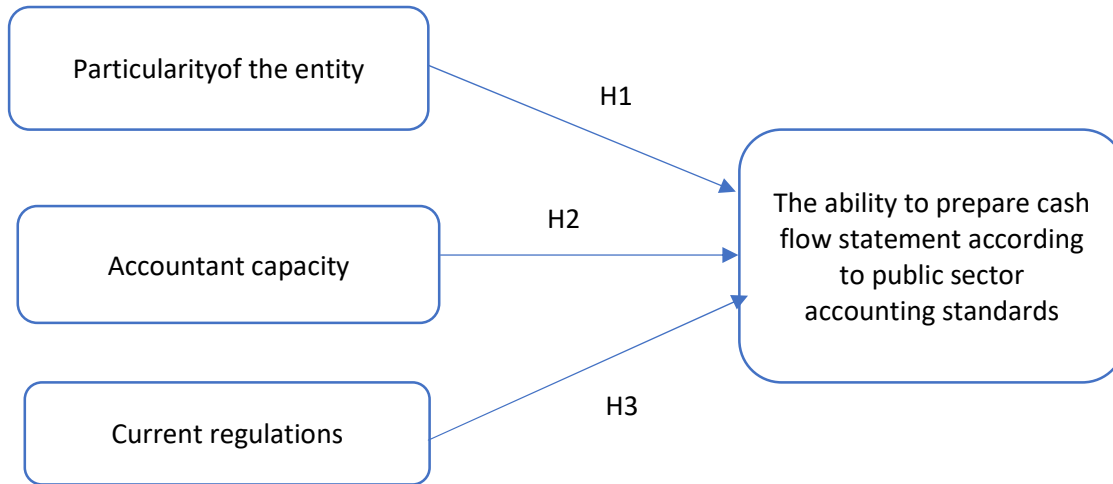
***Particularity of the entity:*** public entity operating in different fields often have their own characteristics, especially the ones relating to financial management and regulations on budget management. These characteristics greatly affect the ability to prepare cash flow statements. In addition, facilities, accounting information systems and support from entity managers also have an important impact on the ability to prepare cash flow statement according to public sector accounting standards. According to Dang Ngoc Hung (2016), facilities and accounting information systems have a positive influence on the level of application of accounting standards with coefficient  $\beta = 0.17$ . As pointed out by Tran Dinh Khoi Nguyen (2013), there are four non-financial factors that can potentially affect the application of accounting standards in businesses, including "business owner's interest".

***Capacity of accountants:*** The capacity of the accounting staff, the ability to access public sector accounting standards as well as the understanding of the unit's cash flow information greatly affect the ability to prepare a cash flow statement. Tran Dinh Khoi Nguyen (2013) pointed out that there are four non-financial factors that can affect the application of accounting standards in businesses, including "accountant capacity". According to Dang Ngoc Hung (2016), the ability of accountants has a positive influence on the level of application of accounting standards with coefficient  $\beta = 0.1944$ .

***Relevant legal regulations:*** Legal regulations that directly affect the preparation of cash flow statement at public entity of a country include regulations in the Accounting Law and the Budget Law, public sector accounting standards and legal regulations associated with specific industries and fields. According to Dang Ngoc Hung (2016), relevant legal regulations, accounting standards, and guiding circulars have a positive influence on the level of application of accounting standards with coefficient  $\beta = 0.274$ .

### 3. Research Methodology and Research Model

The author uses both qualitative and quantitative research methods. Based on the qualitative research, the author searches for and identifies the factors affecting the ability to prepare cash flow statement according to public sector accounting standards, from which the research model, research hypotheses and influencing factors are proposed. Then, the quantitative research method is used by the author to test the research model and the hypotheses proposed. The proposed research model is as follows:



**Figure 1: Research model**

The proposed research hypotheses include:

**Hypothesis H1:** Particularity of the entity (DTDV) have a positive influence on the ability to prepare cash flow statement according to public sector accounting standards at public entities under the Ministry of Labor - Invalids and Social Affairs.

**Hypothesis H2:** Accountant capacity(KNNV) has a positive influence on the ability to prepare cash flow statement according to public sector accounting standards at public entities under the Ministry of Labor - Invalids and Social Affairs.

**Hypothesis H3:** Current regulations(QDHH) have a positive influence on the ability to prepare cash flow statement according to public sector accounting standards at public entities under the Ministry of Labor - Invalids and Social Affairs.

Measurement scales for variables are constructed as follow:

**Table 1: Measurement scales for variables**

Types of variables	Encode	Name of variables
Independent variables	<b>DTDV</b>	<b>Particularity of the entity</b>
	DTDV1	Functioning and managing characteristics of the entity
	DTDV2	Facilities and accounting information system
	DTDV3	Support from entity manager
	<b>KNNV</b>	<b>Accountant capacity</b>
	KNNV1	Capacity of accountants
	KNNV2	Ability to access the changes in public sector accounting standards

	KNNV3	Experience to understand entity's cash flow
	<b>QDHH</b>	<b>Current regulations</b>
	QDHH1	System of public sector accounting standards
	QDHH2	Guiding circulations
	QDHH3	Complexity of regulations
Dependent variables	<b>KN</b>	<b>Ability to prepare cash flow statements according to public sector accounting standards</b>

(Source: Author's Suggestion)

The author uses primary data collected through a survey in 2023. The survey was designed on the Google Forms platform with most questions measured on a Likert 5-point scale (1 = strongly disagree to 5 = strongly agree). The survey was conducted with public service units under the Ministry of Labor - Invalids and Social Affairs. The collected data was cleaned, encoded, and inserted into SPSS 26 software with 215 observations. With the support of SPSS 26 software, the author performed data analysis using scale validation, descriptive statistics, and regression analysis techniques.

#### 4. Research Results

##### 4.1. Descriptive statistics of the variables in the model

**Table 2:** Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
DTDV1	215	2.00	5.00	4.2047	.72019
DTDV2	215	2.00	5.00	3.8186	.62624
DTDV3	215	2.00	5.00	3.6512	.69992
KNNV1	215	2.00	5.00	3.8605	.70979
KNNV2	215	2.00	5.00	3.6233	.73778
KNNV3	215	2.00	4.00	3.1442	.61344
QDHH1	215	2.00	5.00	4.1535	.73604
QDHH2	215	2.00	5.00	3.8465	.72966
QDHH3	215	2.00	5.00	3.5581	.69384
KN	215	2.00	5.00	3.7488	.78072
Valid N (listwise)	215				

(Source: Result from SPSS 26 (2024))

The ability to prepare cash flow statements according to public sector accounting standards has a relatively high average value (3.74). Most of the survey units have the ability to prepare cash flow statements according to public sector accounting standards. The observed variables of the independent variable all have high values, almost all greater than 3.5, with only 1 observed variable at 3.1.

##### 4.2. Scale analysis

Scale analysis was conducted based on Cronbach's Alpha coefficient and exploratory factor analysis (EFA). To test the reliability of the scale for each variable, the author used Cronbach's Alpha test. The test helps to assess the appropriateness of the scale, thereby allowing the elimination of inappropriate observed variables. At the same time, this test also helps to indicate the contribution of the variable in measuring the impact of the variable. According to the test results, the Cronbach's Alpha coefficient is 0.813 for the scale for the variable current regulations (QDHH); 0.784 for the scale for the variable accountant capacity (KNNV); 0.729 for the scale for the variable particularity of entity (DTDV). Dependent variable: The ability to prepare cash flow statements according to public sector accounting standards. These coefficients are all

greater than 0.6 and the corrected item – total correlation is greater than 0.3, indicating that the scale is sufficient.

Exploratory factor analysis (EFA) was conducted in two rounds. Round 1 was performed for the independent variables. The analysis results showed that: The KMO coefficient is 0.752, so the factor analysis is appropriate. Bartlett's test is statistically significant because the Bartlett's sig coefficient is  $.000 < 0.05$ , proving that the observed variables are correlated with each other in the factor. The Eigenvalues coefficient is greater than 1 and 3 factors are extracted with good information summary. The total extracted variance is  $69.91\% > 50\%$ , showing that the EFA model is suitable. The result of the first rotation matrix shows that 9 observed variables are grouped into 3 factors. All observed variables have a Factor Loading greater than 0.5.

Round 2 is the EFA analysis for the dependent variables. 9 independent variables are grouped into 3 dependent variables: particularity of entity (DTDV); accountant capacity (KNNV) and current regulations (QDHH). The results are shown as follows: The KMO coefficient is 0.555, so the factor analysis is appropriate. Bartlett test is statistically significant because the Bartlett's sig coefficient is  $< 0.05$ , proving that the observed variables are correlated with each other in the factor. The total extracted variance is  $> 50\%$  (53.673%), showing that the EFA model is suitable. Pearson correlation analysis was used to test the linear correlation between the dependent variable and the independent variables, and to identify multicollinearity issues early on when the independent variables are strongly correlated with each other. The Pearson correlation coefficient  $r$  ranges from -1 to 1 (significant only when sig is less than 0.05; if sig is greater than 0.05, the pair of variables is not linearly correlated). The results of the analysis are shown in the following table:

**Table 3:** Results of the Pearson correlation analysis  
**Correlations**

		KN	DTDV	KNNV	QDHH
KN	Pearson Correlation	1	.375	.464**	.777**
	Sig. (2-tailed)		.000	.000	.000
	N	215	215	215	215
DTDV	Pearson Correlation	.375	1	.162*	.052
	Sig. (2-tailed)	.000		.017	.445
	N	215	215	215	215
KNNV	Pearson Correlation	.464**	.162*	1	.425**
	Sig. (2-tailed)	.000	.017		.000
	N	215	215	215	215
QDHH	Pearson Correlation	.777**	.052	.425**	1
	Sig. (2-tailed)	.000	.445	.000	
	N	215	215	215	215

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

(Source: Result from SPSS 26 (2024))

The results of the above table show that: The sig coefficients of Pearson correlation are all less than 0.05, indicating that there is a linear relationship between the independent variables DTDV, KNNV, and QDHH and the dependent variable KN. Among them, QDHH and KN have the strongest correlation with  $r = 0.777$ ; KN and DTDV have the weakest correlation with  $r = 0.375$ . The independent variables are weakly correlated with each other, so there is a high probability that no multicollinearity occurs. No independent variable was removed from the model.

### 4.3. Regression analysis

The results of the regression analysis are shown in Tables 4, 5, and 6.  $R^2 = 0.625$  indicates that the independent variables included in the regression model explain 62.5% of the variation in the dependent variable. The Durbin-Watson coefficient is more than 1.5, so there is a high probability that no serial-autocorrelation occurs. According to the results of the ANOVA table, the sig coefficient of the F test is  $0.00 < 0.05$ , indicating that the linear regression model is suitable for the dataset and can be used.

**Table 4:** Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.791	.625	.621	.48038	1.564

**Table 5:** ANOVA analysis

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	81.515	3	40.757	176.617	.000 <sup>b</sup>
	Residual	48.923	212	.231		
	Total	130.437	214			

**Table 6:** Regression model  
Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.498	.244		-2.042	.042		
	KNNV	.222	.063	.163	3.517	.001	.819	1.221
	QDHH	.898	.059	.707	15.215	.000	.819	1.221
	DTDV	.185	.067	.140	2.747	.002	.841	1.189

a. Dependent Variable: KN

The VIF coefficients are all less than 2, proving that there is no multicollinearity. The sig coefficients of the t test for all variables are  $< 0.05$ , so no variable is excluded from the model. All regression coefficients are greater than 0, so all variables included in the analysis are positively correlated with the dependent variable. The above table shows that the variance inflation factor of all variables is less than 10 ( $VIF < 10$ ), therefore, no multicollinearity is detected. The factors affecting the ability to prepare cash flow statements according to public sector accounting standards at public entity under the Ministry of Labor - Invalids and Social Affairs are shown through the standardized linear regression equation as follows:

$$KN = 0,707*QDHH + 0,163*KNNV + 0,140*DTDV$$

### 5. Conclusion and Recommendations

From the results of the standardized regression model, the author identified 3 factors that have an impact on the ability to prepare cash flow statements according to public sector accounting standards at public entity under the Ministry of Labor - Invalids and Social Affairs, arranged in order of decreasing  $\beta$  coefficient as: Impact of the factor of current regulations (QDHH); the capacity of the accountants (KNNV) and the particularity of the entity (DTDV).

The research results show that the beta coefficient of the factor current regulations (QDHH) is **0.707**. With this result, the QDHH factor positively affects the ability to prepare cash flow

statements according to public sector accounting standards at public entity under the Ministry of Labor - Invalids and Social Affairs. This is the factor with the greatest influence

With a beta coefficient of **0.163** according to the research results; the capacity of the accountants (KNNV) also has a positive impact on the ability to prepare cash flow statements according to public sector accounting standards at public entity under the Ministry of Labor - Invalids and Social Affairs.

As one of the factors directly related to the accounting department, it is not surprising that the particularity of the entity (DTDV) also shows a positive impact on the ability to prepare cash flow statements according to public sector accounting standards at public entity under the Ministry of Labor - Invalids and Social Affairs with a beta coefficient of **0.140**.

Thus, through the tests and analyzes that have been carried out with SPSS 26 software, the results show that all the hypotheses proposed in the study are accepted, namely:

**Hypothesis H1:** Particularity of the entity (DTDV) have a positive influence on the ability to prepare cash flow statement according to public sector accounting standards at public entities under the Ministry of Labor - Invalids and Social Affairs.

**Hypothesis H2:** Accountant capacity (KNNV) has a positive influence on the ability to prepare cash flow statement according to public sector accounting standards at public entities under the Ministry of Labor - Invalids and Social Affairs.

**Hypothesis H3:** Current regulations (QDHH) have a positive influence on the ability to prepare cash flow statement according to public sector accounting standards at public entities under the Ministry of Labor - Invalids and Social Affairs.

Based on the research results, to improve the ability to prepare cash flow statements according to public sector accounting standards at public entities under the Ministry of Labor - Invalids and Social Affairs, it is necessary to focus on a number of following issues:

Firstly, it is necessary to further improve manager awareness of the role of cash flow statements in management, especially financial management in the trend of autonomy. From there, further strengthening the support from entity managers for the accounting department. Gradually modernize the accounting information system to provide more timely cash flow information for preparing cash flow statements.

Secondly, have a plan to foster and improve the capacity of accountants, including: encouraging accountants to study to improve their professional capacity, regularly sending accountants to participate in training courses on public accounting standards organized by the Ministry of Finance and professional organizations. Set strict requirements in learning to improve qualifications and ability to access changes in accounting regimes and policies.

Thirdly, current legal regulations are an important basis for preparing cash flow statements. These regulations need to be issued and announced promptly and with enough necessary transition time to ensure that accounting entities have time to update and access them before implementation. This transition period is very important in successfully applying a new regulation, as well as a new accounting policy and standards.

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