

# Differential Change Analysis

## Snapshot

ORC Worldwide's Differential Change Analysis (DCA) generates personalized Goods and Services Differential Update Statements for international assignees. The Statements help assignees understand the complexities of cost-of-living adjustments: how they are calculated and why they change. Providing this information helps promote trust and confidence in the methodology and reduces the time spent explaining details to individual assignees.

Changes are made up of four key components, each of which is clearly explained:

- Exchange rate fluctuation
- Price movement
- Change in expenditure pattern
- Changes in salary and family size

Differential Change Analysis			Impact on Host Spendable in EUR	Explanation of Changes by Factor Since Previous Update	Impact on Differential in USD			
<b>John Doe</b>			1,996	<b>Previous Semi-monthly Amount</b>	918			
Statement Date: <b>Quarter 2 2009</b>			n/a	<b>Exchange Rate Fluctuation</b> The USD strengthened 3.5% relative to the EUR, making goods and services in your host location relatively less expensive to you. If considered alone, this exchange rate movement would cause your Semi-monthly Differential to decrease by USD -89. However, your Semi-monthly Host Spendable Income is not affected by this change.	-89			
Home Location: <b>United States</b>			28	<b>Relative Price Movement</b> Pricings conducted in your home and host locations revealed that prices increased 1.3% faster in Frankfurt than in United States, thus widening the gap in costs between the two locations that the Differential is meant to bridge. If considered alone, this relative price movement would cause your Semi-monthly Differential to increase by USD 36, thereby allowing your Semi-monthly Host Spendable Income to increase by EUR 28 to compensate you for the additional burden imposed upon you by the price increases in your host location that are beyond what you would have experienced in your home location.	36			
Host Location: <b>Frankfurt, Germany</b>			n/a	<b>Changes in Expenditure Patterns</b> Not applicable - No change	n/a			
			n/a	<b>Changes in Salary and Family Size</b> Not applicable - No change	n/a			
			28	<b>Total Net Change</b>	-54			
			2,024	<b>New Semi-monthly Amount</b>	864			
Demographics			Calculation of Semi-monthly Host Spendable Income and Differential					
Differential Update	Annual Salary in USD	Family Size	Host Spendable Income in EUR	Exchange Rate Conversion EUR to USD	Converted Host Spendable Income in USD	Home Spendable Income in USD	Differential in USD	
2009- Quarter 2	100,000	1	2,024	@ 1.2908	= 2,613	- 1,749	= 864	
2009- Quarter 1	100,000	1	1,996	@ 1.3356	= 2,667	- 1,749	= 918	
2008- Quarter 4	100,000	1	1,971	@ 1.4029	= 2,765	- 1,725	= 1,041	
2008- Quarter 3	95,000	1	1,931	@ 1.5446	= 2,983	- 1,661	= 1,322	
2008- Quarter 2	95,000	1	1,931	@ 1.5637	= 3,020	- 1,661	= 1,359	

The elements that determine the differential are clearly set out for the current period and up to four previous updates:

- **Host spendable income** in the host currency
- **Home spendable income** in the home currency
- **Host spendable income** in the home currency
- **Final differential** in the home currency

# Differential Change Analysis

The **Equalization Methodology** page provides a detailed explanation of how the differential is calculated, and the **Explanation of Factors** page describes each factor that affects the differential.

If broader issues arise, assignees can also get information about their compensation from two key tutorial modules in ORC's online website, VICKI, provided to accompany the DCA. These modules cover Goods and Services and Changes to Pay.

The screenshot displays the 'Differential Change Analysis (DCA)' website. It features two main sections: 'Equalization Methodology' and 'Explanation of Factors'. The 'Equalization Methodology' section explains that while working abroad, one continues to use a portion of their income on living expenses, and that the amount of income used to purchase goods and services is referred to as 'spendable income'. It lists four key points: 1) Prices are continually gathered in the host country for a typical goods and services basket. 2) As two different currencies are generally involved, it is necessary to convert your host spendable income into your home country currency at the latest exchange rate. 3) ORC develops comparable estimates for the cost of equivalent goods and services typically by employees in the home country to establish a 'home country spendable'. 4) Your employer establishes your differential by deducting your home spendable income from your spendable income (converted to your home currency).

The 'Explanation of Factors' section is divided into three sub-sections: 'Exchange Rate Fluctuation', 'Relative Price Movement', and 'Changes in Expenditure Patterns'. 'Exchange Rate Fluctuation' provides an example of a US expatriate in Australia, showing how a 20% change in the exchange rate impacts the differential. 'Relative Price Movement' explains that if prices in the host location increase faster than in the home location, the differential will increase. 'Changes in Expenditure Patterns' notes that as a function of salary and family size, the average amount needed to purchase goods and services in the home location will change as expenditure patterns shift.

VICKI was created to provide international assignees with accessible, comprehensive, non-technical explanations of their compensation, allowances and benefits, primarily to reduce the burden on administrators of delivering individualized explanations.

Access to the complete set of eight modules listed below is available as an additional option:

- Pay Philosophy
- Pay Delivery
- Goods and Services
- Changes to Pay
- Housing
- Taxes
- Benefits
- Premiums and Incentives

The screenshot shows the VICKI Virtual International Compensation Knowledge Instructor interface. It features three overlapping modules: 'Differential Updates', 'Inflation and Deflation', and 'Differentials'. The 'Differential Updates' module explains that the differential supplements income if the cost of living is higher in the assignment location. The 'Inflation and Deflation' module notes that inflation in the home country has an impact on the differential. The 'Differentials' module explains that the differential is calculated by comparing the cost of living in the home location (including spendable income) with the cost of living in the host location (including host spendable income).

For more information please contact:  
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