

## Salary Purchasing Power Parity

### Report Criteria

The following information was supplied for this report:

Report Reference	SPPP Demo Report
Date	January 01, 2018
Individual's Name	Joe Bloggs
Relocating From (Home Location)	USA, Houston TX
Relocating To (Host Location)	Qatar, Doha
Negative cost of living <sup>1</sup>	ON
Negative hardship differences <sup>2</sup>	ON
Survey Date <sup>3</sup>	January 01, 2018

### Basket Groups

The following basket selections were made in the calculator:

Excluded: Provide by Employer/State	Included: Paid by Employees Salary
Education Healthcare Household	Alcohol & Tobacco Clothing Communication Furniture & Appliances Groceries Miscellaneous Personal Care Recreation & Culture Restaurants Meals Out and Hotels Transport

The baskets are based on information for approximately 200 different goods and services. The prices for the same quantity of each item are collected in each location. The data is thoroughly quality assured and manually checked and moderated by experienced analysts. For ease of use, the 200 goods and services have been grouped into 13 basket groups. To compare the cost of living, the total cost of the basket in each location is used. The difference in the cost of the basket at the ruling exchange rate is the basis of the cost of living difference.

The basket groups that have been excluded are those that will be provided by either the employing company or in some cases by the state in the new location. The basket groups that have been included in calculating the cost of living difference are those that will be paid by the employee from their salary.

## Results

Based on the criteria, locations, and included basket groups as described in the previous section of this report, the following results are reported.

### Cost of Living Difference

The cost of living differences for the included basket groups, which will be paid by the employee from their salary, are as follows:

Selected Baskets	Home Location USA, Houston TX Weighted COLI <sup>4</sup>	Host Location Qatar, Doha Weighted COLI <sup>4</sup>	Cost of Living in Qatar, Doha compared to USA, Houston TX	
Alcohol & Tobacco	1.72	2.14	24.42%	Doha is <b>more expensive</b>
Clothing	1.76	2.46	39.77%	Doha is <b>more expensive</b>
Communication	2.13	2.41	13.15%	Doha is <b>more expensive</b>
Furniture & Appliances	1.82	3.83	110.44%	Doha is <b>more expensive</b>
Groceries	11.02	13.61	23.50%	Doha is <b>more expensive</b>
Miscellaneous	1.64	4.83	194.51%	Doha is <b>more expensive</b>
Personal Care	1.61	1.66	3.11%	Doha is <b>more expensive</b>
Recreation & Culture	3.28	5.63	71.65%	Doha is <b>more expensive</b>
Restaurants Meals Out and Hotels	1.59	1.68	5.66%	Doha is <b>more expensive</b>
Transport	15.31	11.23	-26.65%	Doha is <b>cheaper</b>
<b>Overall Cost of Living Index</b>	<b>41.88</b>	<b>49.48</b>	<b>18.15%</b>	<b>Doha is more expensive</b>
<b>The overall weighted cost of living difference between USA, Houston TX and Qatar, Doha is 18.15%.</b>				

The cost of living difference is the difference in the cost of the same basket of goods and services in order to maintain the same standard of living when relocating to a different location. When you relocate, the cost of everything you spend your salary on will either cost more or less. Some of the costs may be higher in the new location and some of the costs may be lower.

When comparing the cost of living between 2 locations, the difference in the aggregate cost of all the items in the selected baskets are examined in each location, this is done by using the average reported price in each location for the same quantity of each item.

Based on the selected basket groups, the cost of living difference has been calculated between the selected locations. If you change the selected basket groups you are likely to get different results, as some basket groups may cost relatively more and some relatively less between the selected locations.

Weights<sup>4</sup> reflect the proportion of salary spent on each basket as a result of extensive research of actual spending habits. By applying the weights we have reported the weighted indexes which are used to report the overall weighted difference in the cost of living.

### Hardship Difference

The **Home** Location USA, Houston TX is ranked as a minimal hardship location with a hardship premium of 10%  
 The **To** Location Qatar, Doha is ranked as a high degree of hardship location with a hardship premium of 30%  
 The relative difference in hardship premium (i.e. Host Location Premium minus Home Location Premium) is 20%

Hardship is the relative difference in quality of living/lifestyle a person and their family are likely to experience, assessed in global terms, when moving between different locations. The hardship ranking system measures the relative quality of living conditions between locations, and assesses the level of difficulty that will be experienced in adapting to a new location.

### Exchange Rate Difference

The following arbitrage exchange rate was used as the basis of the Salary Purchasing Power Parity calculation. (This exchange rate is updated quarterly):

3.6463	Qatari Rial (QAR)	to	1	US Dollar (USD)
0.2743	US Dollar (USD)	to	1	Qatari Rial (QAR)

The exchange rate between two currencies specifies how much one currency is worth in terms of the other. Most countries have a free-floating exchange rate. This means the rate fluctuates as a result of supply and demand. Exchange rates fluctuate constantly whenever the values of any two currencies change. A currency tends to be more valuable when demand is greater than supply (i.e. when a large amount of that currency is sought after for purchase). A currency tends to be less valuable when demand is less than supply (i.e. when very little of that currency is required for purchase. This typically occurs when the majority prefer holding their wealth in some other form, possibly in another currency). Current and future exchange rates incorporate interest rate differentials between two currencies. Large interest rate differentials may result in a temporary imbalance in exchange rates. The arbitrage<sup>5</sup> exchange rate is used in the calculation rather than the ruling exchange rate in order that any temporary price differences are negated.

### Salary Purchasing Power Parity

Applying the cost of living difference based on what will be paid from salary, together with the hardship difference, and arbitrage exchange rate, the SPPP calculation is as follows:

Home/Current location salary	75,000.00	US Dollar (USD)
+ Cost of living difference 18.15%	13,612.50	US Dollar (USD)
+ Hardship Difference 20%	15,000.00	US Dollar (USD)
<b>Total</b>	<b>103,612.50</b>	<b>US Dollar (USD)</b>
x Exchange Rate 3.6463		
<b>Salary in Host/New location</b>	<b>377,802.26</b>	<b>Qatari Rial (QAR)</b>

This means, based on all the above factors, that a person would require a salary of **377,802.26 Qatari Rial (QAR)** in Qatar, Doha to have the same standard of living as currently enjoyed in USA, Houston TX on a salary of **75,000.00 US Dollar (USD)**. This salary compensates for the overall cost of living difference of **18.15%**, the hardship difference of **20%**, and the exchange rate.

## Notes

**(1) Negative cost of living:** You can choose if you want to allow negative cost of living differences to be applied to your calculation by checking the box. If you choose to allow negative cost of living differences, the calculator will decrease the salary when the cost of living is lower in the TO (Host) location. Unless you choose to allow negative cost of living differences, the calculator will only apply positive (higher) cost of living differences.

**(2) Negative hardship differences:** You can choose if you want to allow negative hardship differences to be applied to your calculation by checking the box. If you choose to allow negative hardship differences, the calculator will decrease the salary when the hardship is lower in the TO (Host) location. Unless you choose to allow negative hardship differences, the calculator will only apply positive (higher) hardship differences.

**(3) Survey Date:** The cost of living, hardship, and exchange rate data are updated quarterly at the time of pricing the baskets. Increases in prices in the host location (i.e. inflation) will cause the host cost of living index to increase. Decrease in prices (i.e. deflation) in the host location will cause the host cost of living index to decrease.

**(4) Weights:** The weights used per basket group for the overall weighted cost of living index difference are as follows:

Alcohol & Tobacco	2.0%
Clothing	2.5%
Communication	2.0%
Education	5.0%
Furniture & Appliances	5.0%
Groceries	16.5%
Healthcare	5.0%
Household	30.0%
Miscellaneous	3.0%
Personal Care	3.0%
Recreation & Culture	6.0%
Restaurants Meals Out and Hotels	2.0%
Transport	18.0%

The formula used to calculate the cost of living difference percentage is as follows:

$$\frac{(\text{Host Index} - \text{Home Index}) \times 100}{\text{Home Index}}$$

**(5) Arbitrage Exchange Rate:** Arbitrage is the practice of taking advantage of a price difference between two or more markets. The Arbitrage Exchange Rate calculates each currency against a single currency in order that any temporary price differences are negated.