



**VettaFi Developed Ex United States
Demographic Dividend Growth Index DXNDDG**

**VettaFi Emerging Markets Demographic
Dividend Growth Index EMDDG**

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Introduction

Index Objective

The VettaFi Demographic Dividend Growth Index Family is family of indexes whose constituent weights are adjusted by a factor that measures the relative demographic growth rate of a country's working age population.

Highlights

Developed Ex United States Demographic Dividend Growth Index -

The index modifies the VettaFi Developed World ex United States Index (VFDXUS) by applying a working age population growth factor to its constituent weights.

Emerging Markets Demographic Dividend Growth Index -

The index modifies the VettaFi Emerging Markets Index (VFEM) by applying a working age population growth factor to its constituent weights.

Dates

Reference Dates: Last Business Date of month prior to Rebalance/Reconstitution Month.

Reconstitution Dates: Indexes reconstituted semi-annually on the third Friday of March and September.

Weight Date: Thursday prior to second Friday of Rebalance/Reconstitution Month.

Rebalance Dates: Indexes are rebalanced quarterly on the third Friday of the last month of each calendar quarter.

Supporting Documents

This methodology is meant to be read in conjunction with supporting documents providing greater detail with respect to the policies, procedures and calculations described herein.

The list of the main supplemental documents for this methodology can be found in the Methodologies and Governance tabs on the [Index Resources](#) page as follows:

Supporting Documents
Index Maintenance Policy
Index Governance
Index Policies
Methodology Policies
Glossary
Index Change and Consultation Policy

Index Construction

Universe

Index	Universe
VettaFi Developed Ex United States Demographic Dividend Growth Index (DXNDDG)	VettaFi Developed World ex United States Index (VFDXUS)
VettaFi Emerging Markets Demographic Dividend Growth Index (EMDDG)	VettaFi Emerging Markets Index (VFEM)

Constituent Selection

Constituents and pro-forma constituents are identical to their universes.

Constituent Weightings & Constraints

Weights are adjusted float-market cap where the float market cap is adjusted by a country weight factor based on the country's demographic rate of growth.

Float Market Cap (FMC) adjustment by Demographic Growth Rate Factor:

The ten-year projected growth of each country is determined using World Bank Data (supplemented with United Nations Data for Taiwan).

The country growth rates are Z-scored and fitted to a normal distribution which maps the Z-scores to values between 0 and 1.

The normalized Z-scores are applied so that FMC is not adjusted by a factor less than 0.5 or greater than 2.0.

The float market cap is adjusted as follows:

$$\text{Adjusted FMC} = \text{FMC} * ((\text{Normalized Z-Score} * 1.5) + 0.5)$$

Index Maintenance

Rebalancing and Reconstitution

The Indexes are rebalanced on the "Rebalance Date" and additionally reconstituted on the "Reconstitution Date". Pricing used in share weights used for reconstitutions are as of the "Weight Date". Share weights for the rebalanced Indexes are computed as of the "Weight Date". Changes to the Indexes related to the rebalances are as of the "Rebalance Date". Additions are only made on reconstitution dates.

Corporate Actions

Please refer to the Index Maintenance Policy document for information on Corporate Action processing.

Base Date and History Availability

Index history availability, base dates and base values are shown in the table below.

Index	Price Index	Base Date	Base Value	Total Return Index	Base Date	Base Value
VettaFi Developed Ex United States Demographic Dividend Growth Index	DXNDDG	12/15/2000	1000	DXNDDGT	12/15/2000	1000
VettaFi Emerging Markets Demographic Dividend Growth Index	EMDDG	12/15/2000	1000	EMDDGT	12/15/2000	1000

Index Calculation

Please refer to the Index Maintenance Policy document for information on index calculations.

Index Governance

The index is governed and managed by a VettaFi Index Committee for the purpose of meeting the goals of the index. For more information, please refer to the Index Governance document.

Index Policies

Please refer to the Index Policies document for information regarding Announcements, Holiday Schedules, Unexpected Exchange Closures, and Recalculation Policy.

Contact Information

For any questions regarding an index, please contact: index.production@vettafi.com